```
XX
PS   Example 2; SEQ ID NO 137; 324pp; English.
XX
CC   The invention comprises an antibody that specifically binds a
CC   regeneration IV (Reg IV) protein. The invention specifically comprises
CC   the amino acid and coding sequences of single chain antibody fragments
CC   (scFv's) that bind Reg IV protein. The antibody of the invention is
CC   useful for treating, preventing and ameliorating: inflammatory bowel
CC   disorders (e.g. ulcerative colitis or Crohn's disease), diabetes (e.g.
CC   non-insulin dependent diabetes or insulin dependent diabetes), and cancer
CC   of the gastrointestinal tract. The antibody of the invention is also
CC   useful for detecting the expression of a Reg IV protein. The present DNA
CC   sequence represents a PCR primer that was used to amplify a Reg IV-
CC   specific scFv coding sequence.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 23;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||| |||
Db          1 GAGGTGCAGCTGGTGGAGTCTG 22


RESULT 732
ADJ93418
ID   ADJ93418 standard; DNA; 23 BP.
XX
AC   ADJ93418;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human BGS-42 protein-related PCR primer SeqID69.
XX
KW   testis-specific tubulin tyrosine-ligase-like polypeptide;
KW   BGS-42 polypeptide; cytostatic; respiratory-Gen; gastrointestinal-Gen;
KW   neuroprotective; endocrine-Gen; antiinflammatory; anabolic; hypertensive;
KW   osteopathic; nootropic; antiparkinsonian; antiarthritic; antiasthmatic;
KW   anti-HIV; antibacterial; immunosuppressive; antiseborrheic;
KW   dermatological; tyrosine ligase modulator; gene therapy; tubulin ligase;
KW   tubulin-carboxypeptidase; cellular proliferation; reproductive disorder;
KW   testicular disorder; testicular cancer; pulmonary disorder; lung cancer;
KW   gastrointestinal disorder; colon cancer; stomach cancer; neural disorder;
KW   brain cancer; liver cancer; proliferative condition; testis; lung;
KW   small intestine; brain; lymph tissue; infertility; Cushing's syndrome;
KW   emphysema; pneumonia; Addison's disease; acromegaly; Alzheimer's disease;
KW   Parkinson's disease; immunological disorder; arthritis; asthma; AIDS;
KW   sepsis; acne; Sjogren's disease; scleroderma; human; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004005487-A2.
XX
PD   15-JAN-2004.
XX
PF   09-JUL-2003; 2003WO-US021605.
XX
PR   09-JUL-2002; 2002US-0394725P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Feder JN,  Wu S,  Nelson TC;
XX
DR   WPI; 2004-099381/10.
XX
PT   New testis-specific tubulin tyrosine-ligase-like BGS-42 polypeptide,
PT   useful for preventing, treating or ameliorating a medical condition, e.g.
PT   aberrant cellular proliferation, reproductive disorders or testicular
PT   disorders.
XX
PS   Example 34; SEQ ID NO 69; 343pp; English.
XX
CC   This invention relates to a novel testis-specific tubulin tyrosine-ligase
CC   -like polypeptide, designated the BGS-42 polypeptide. The invention may
CC   be useful for the development of compounds with a cytostatic, respiratory
CC   -Gen, gastrointestinal-Gen, neuroprotective, endocrine-Gen,
CC   antiinflammatory, anabolic, hypertensive, osteopathic, nootropic,
CC   antiparkinsonian, antiarthritic, antiasthmatic, anti-HIV, antibacterial,
CC   immunosuppressive, antiseborrheic or dermatological activity acting as
CC   tyrosine ligase modulators. In addition, the disclosed sequences may be
CC   useful for gene therapy. The BGS-42 polypeptide or polynucleotide can be
CC   used for diagnosing a pathological condition or a susceptibility to a
CC   pathological condition in a subject, and for preventing, treating or
CC   ameliorating a medical condition, such as a disorder related to aberrant
CC   tubulin ligase activity, a disorder related to aberrant tubulin-
CC   carboxypeptidase activity, aberrant cellular proliferation, reproductive
CC   disorders, testicular disorders, testicular cancer, pulmonary disorders,
CC   lung cancer, gastrointestinal disorders, colon cancer, stomach cancer,
CC   neural disorders, brain cancer, liver cancer, or proliferative condition
CC   of the testis, lung, small intestine, brain or lymph tissue. The BGS-42
CC   polypeptide, polynucleotide, or their modulators are also useful for
CC   treating infertility, Cushing's syndrome, emphysema, pneumonia, Addison's
CC   disease, acromegaly, Alzheimer's disease, or Parkinson's disease. The BGS
CC   -42 polypeptide can be used as a preventive agent for immunological
CC   disorders including arthritis, asthma, AIDS, sepsis, acne, Sjogren's
CC   disease or scleroderma. The antibodies may be used to purify, detect and
CC   target the BGS-42 polypeptides. The present sequence is that of a PCR
CC   primer which was used in the exemplification of the invention.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 23;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||| |||
Db          1 GAGGTGCAGCTGGTGGAGTCTG 22


RESULT 733
ADL76556
ID   ADL76556 standard; DNA; 23 BP.
XX
AC   ADL76556;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human heavy variable primer, Hu VH3 5'.
XX
KW   albumin fusion protein; cytostatic; antianaemic; antiarthritic;
KW   antiasthmatic; anti-HIV; immunosuppressive; antiinflammatory;
KW   antipsoriatic; antibacterial; osteopathic; dermatological; antigout;
KW   immunomodulator; antiarrhythmic; cardiant; nootropic; antilipaemic;
KW   nephrotropic; uropathic; neuroprotective; antiparkinsonian; tranquilizer;
KW   antidiabetic; anabolic; hypertensive; vulnerary; gene therapy; cancer;
KW   reproductive system disorder; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2004010134-A1.
XX
PD   15-JAN-2004.
XX
PF   12-APR-2001; 2001US-00833245.
XX
PR   12-APR-2000; 2000US-0229358P.
PR   25-APR-2000; 2000US-0199384P.
PR   21-DEC-2000; 2000US-0256931P.
XX
PA   (ROSE/) ROSEN C A.
PA   (HASE/) HASELTINE W A.
XX
PI   Rosen CA,  Haseltine WA;
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```
XX
DR   WPI; 2004-090519/09.
XX
PT   New albumin fusion proteins, useful for diagnosing, treating, preventing
PT   or ameliorating diseases or disorders e.g. cancer, anemia, arthritis,
PT   asthma, inflammatory bowel disease or Alzheimer's disease.
XX
PS   Example 60; SEQ ID NO 38; 279pp; English.
XX
CC   The invention relates to a novel albumin fusion protein. The invention
CC   further relates to: a composition comprising the albumin fusion protein
CC   and a pharmaceutical carrier; a kit comprising the composition of the
CC   albumin fusion protein formula; a method of treating a disease or
CC   disorder in a patient comprising the step of administering the albumin
CC   fusion protein; a method of treating a patient with a disease or disorder
CC   that is modulated by Therapeutic protein: X, or its fragment or variant;
CC   a method of extending the shelf life of Therapeutic protein: X, or its
CC   fragment or variant; a nucleic acid molecule comprising a polynucleotide
CC   sequence encoding the albumin fusion protein; a vector comprising the
CC   nucleic acid molecule of the albumin fusion protein; and a host cell
CC   comprising the nucleic acid molecule of the albumin fusion protein. The
CC   albumin fusion protein and its compositions have the following
CC   activities: cytostatic, antianaemic, antiarthritic, antiasthmatic, anti-
CC   HIV, immunosuppressive, antiinflammatory, antipsoriatic, antibacterial,
CC   osteopathic, dermatological, antigout, immunomodulator, antiarrhythmic,
CC   cardiant, nootropic, antilipaemic, nephrotropic, uropathic,
CC   neuroprotective, antiparkinsonian, tranquilizer, antidiabetic, anabolic,
CC   hypertensive, and vulnerary. The albumin fusion protein nucleic acid may
CC   be used in gene therapy to treat disorders. The albumin fusion protein is
CC   useful for diagnosing, treating, preventing or ameliorating diseases or
CC   disorders comprising indication: Y. The diseases or disorders include:
CC   cancer (e.g. leukaemia, colon, bone, breast, liver or lung cancer),
CC   immune or haematopoietic diseases (e.g. anaemia, Hodgkin's disease, acute
CC   lymphocytic anaemia, multiple myeloma, arthritis, asthma, AIDS,
CC   autoimmune disease, inflammatory bowel disease, psoriasis or Lyme
CC   disease), reproductive system disorders (e.g. prostatitis, inguinal
CC   hernia, varicocele, penile carcinoma, ovarian adenocarcinoma or Sertoli-
CC   leydig tumours), musculoskeletal diseases (e.g. giant cell tumours,
CC   Paget's disease, systemic lupus erythematosus, gout, muscular dystrophy
CC   or cachexia), cardiovascular disease (e.g. rhabdomyomas, heart disease,
CC   arrhythmia, cardiac arrest, heat valve disease, hypernatraemia or
CC   hyponatraemia), mixed foetal diseases (e.g. foetal alcohol syndrome,
CC   Down's syndrome, Patau syndrome, Turner's syndrome, Apert syndrome or Tay
CC   -Sachs disease), excretory diseases (e.g. urinary incontinence, urinary
CC   tract infections or renal disorders), neural or sensory disease (e.g.
CC   Alzheimer's disease, Parkinson's disease, cerebral malaria, meningitis,
CC   cerebellar ataxia, attention deficit disorder, autism or obsessive
CC   compulsive disorder), respiratory disease (e.g. emphysema, lung cancer or
CC   occupational lung disease), endocrine diseases (e.g. diabetes, Addison's
CC   disease or glomerulonephritis), digestive diseases (e.g. portal
CC   hypertension, irritable bowel disease, gastric atrophy or pancreatitis)
CC   or connective tissue or epithelial diseases (e.g. Crohn's disease,
CC   scleroderma, wound healing or epidermolysis bullosa). This polynucleotide
CC   sequence represents a primer used in the exemplification of the
CC   invention.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 23;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||||| |||
Db          1 GAGGTGCAGCTGGTGGAGTCTG 22


RESULT 734
ADL22837
ID   ADL22837 standard; DNA; 23 BP.
XX
AC   ADL22837;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Anti-human C3a receptor antibody VH domain PCR primer VH3-5'.
XX
KW   PCR; human; C3a receptor; antiasthmatic; antiallergic; cardiovascular;
KW   antiinflammatory; antiarthritic; receptor; antirheumatic; dermatological;
KW   immunosuppressive; vulnerary; antimicrobial; cytostatic; ss; primer;
KW   antibody.
XX
OS   Homo sapiens.
XX
PN   WO2004013287-A2.
XX
PD   12-FEB-2004.
XX
PF   31-JUL-2003; 2003WO-US023826.
XX
PR   02-AUG-2002; 2002US-0400057P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA;
XX
DR   WPI; 2004-169327/16.
XX
PT   New isolated antibody that specifically binds C3a Receptor, useful for
PT   preventing, detecting, diagnosing, treating or ameliorating asthma,
PT   allergy, rheumatoid arthritis, systemic lupus erythematosus, arthritis or
PT   proliferative disorders.
XX
PS   Example 2; Page 162; 199pp; English.
XX
CC   The present invention relates to an isolated antibody that specifically
CC   binds the C3a Receptor, and which is shown in the specification. The
CC   antibody is useful for preventing, detecting, diagnosing, treating or
CC   ameliorating asthma, allergy, inflammatory or immune disorders. It is
CC   also useful for treating, preventing or ameliorating rheumatoid
CC   arthritis, systemic lupus erythematosus, arthritis, immunological
CC   hypersensitivities, physical trauma, organ transplant rejection,
CC   infectious diseases, cardiovascular disorders or proliferative disorders.
CC   The present sequence is a PCR primer used to amplify the coding sequence
CC   of a VH domain of an antibody directed at the human C3a receptor.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 23;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||||| |||
Db          1 GAGGTGCAGCTGGTGGAGTCTG 22


RESULT 735
ADN49125
ID   ADN49125 standard; DNA; 23 BP.
XX
AC   ADN49125;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human VH gene amplifying PCR primer, Hu VH3-5'.
XX
KW   G-protein coupled receptor; GPCR; BMSOTR; therapy;
KW   G-protein coupled signalling; oxytocin-related disorder;
KW   neurological disorder; spinal cord injury; ischaemia; infarction;
KW   cardiovascular disorder; acute heart failure; pancreatic cancer;
KW   diabetes mellitus; pancreatitis; immune-related disorder; HIV infection;
KW   asthma; metabolic disorder; endocrinal disorder; Cushing's syndrome;
KW   hyperthyroidism; genetic syndrome; Down's syndrome;
KW   Klinefelter's syndrome; Turner's syndrome; human; VH; PCR; primer; ss.
XX
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OS Homo sapiens.
XX
PN US2004086881-A1.
XX
PD 06-MAY-2004.
XX
PF 12-MAR-2003; 2003US-00334360.
XX
PR 04-JAN-2002; 2002US-0345706P.
PR 06-FEB-2002; 2002US-0355559P.
XX
PA (RAMA/) RAMANATHAN C S.
PA (GOPA/) GOPAL S.
PA (MINT/) MINTIER G A.
PA (FEDE/) FEDER J.
XX
PI Ramanathan CS, Gopal S, Mintier GA, Feder J;
XX
DR WPI; 2004-356195/33.
XX
PT Novel isolated human G-protein coupled receptor BMSOTR polypeptide and
PT its variant, useful for diagnosing and treating neurological disorders
PT such as spinal cord injuries or ischemia.
XX
PS Example 13; SEQ ID NO 17; 97pp; English.
XX
CC The invention relates to G-protein coupled receptor (GPCR) BMSOTR and its
CC corresponding nucleic acid sequence. GPCR is useful for diagnosing,
CC preventing, treating or ameliorating a medical condition such as disorder
CC related to aberrant G-protein coupled signalling, oxytocin-related
CC disorders, neurological disorders e.g. spinal cord injuries, ischaemia,
CC infarction, etc., disorder related to aberrant cell cycle regulation,
CC cardiovascular disorders such as acute heart failure, disorder of the
CC pancreas e.g. pancreatic cancer, diabetes mellitus, pancreatitis, alcohol
CC induced pancreatitis, etc., immune-related disorders e.g. HIV infections,
CC asthma, etc., metabolic disorders, endocrinal disorders e.g. Cushing's
CC syndrome, hyperthyroidism, etc., mitochondrial DNA aberrations and
CC genetic syndrome e.g. Down's syndrome, Klinefelter's syndrome, Turner's
CC syndrome, etc. The present sequence is a PCR primer used for amplifying
CC human VH gene. This sequence is used in the exemplification of the
CC invention.
XX
SQ Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 1.1e+03;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 853 GAGGAGGAGCTGGTGGAGGCTG 874
|||| | |||||||||| |||
Db 1 GAGGTGCAGCTGGTGGAGTCTG 22

RESULT 736
ADO36954
ID ADO36954 standard; DNA; 23 BP.
XX
AC ADO36954;
XX
DT 29-JUL-2004 (first entry)
XX
DE PCR primer of the invention HuVH3aBACK SEQ ID NO:14.
XX
KW ss; primer; PCR; polypeptide-tagged collection; capture system;
KW tagged polypeptide; pharmaceutical; diagnostic.
XX
OS Synthetic.
XX
PN WO2004039962-A2.
XX
PD 13-MAY-2004.
XX
PF 30-OCT-2003; 2003WO-US034821.
XX
PR 30-OCT-2002; 2002US-0422923P.
PR 30-OCT-2002; 2002US-0423018P.
XX
PA (POIN-) POINTILLISTE INC.
XX
PI Ault-Riche D, Atkinson B, Geysen MH;
XX
DR WPI; 2004-376185/35.
XX
PT Evenly distributing tags among members of a starting library, useful in
PT developing pharmaceuticals and diagnostics, comprises dividing the
PT starting library into sub libraries and attaching a tag to members of
PT each sub library.
XX
PS Disclosure; SEQ ID NO 14; 510pp; English.
XX
CC The invention relates to novel methods for producing polypeptide-tagged
CC collections and capture systems containing the tagged polypeptides. The
CC method is useful for evenly distributing tags among members of a starting
CC library. The system, collection, kits and methods are useful in
CC developing pharmaceuticals and diagnostics. The present sequence is used
CC in the exemplification of the invention.
XX
SQ Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 1.1e+03;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 853 GAGGAGGAGCTGGTGGAGGCTG 874
|||| | |||||||||| |||
Db 1 GAGGTGCAGCTGGTGGAGTCTG 22

RESULT 737
ADO27476
ID ADO27476 standard; DNA; 23 BP.
XX
AC ADO27476;
XX
DT 12-AUG-2004 (first entry)
XX
DE Capture system related primer, SEQ ID 14.
XX
KW Capture system; primer; ss.
XX
OS Synthetic.
XX
PN WO2004042019-A2.
XX
PD 21-MAY-2004.
XX
PF 30-OCT-2003; 2003WO-US034693.
XX
PR 30-OCT-2002; 2002US-0422923P.
PR 30-OCT-2002; 2002US-0423018P.
XX
PA (POIN-) POINTILLISTE INC.
XX
PI Ault-Riche D, Atkinson B, Jesaitis L, Kumble KD, Sperinde G;
XX
DR WPI; 2004-431543/40.
XX
PT Capturing biological particles, by contacting biological particles with
PT capture system comprising addressed loci, addressed collection of
PT polypeptide tagged molecules, capture agents, and polypeptide tag to
PT which capture agent binds.
XX
PS Disclosure; SEQ ID NO 14; 505pp; English.
XX
CC The present invention relates to a method for the capture and analysis of
CC biological particle using a capture system. The method is useful for

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CC   capturing biological particles such as cells, portions of cells, cell
CC   membranes, viruses, viral capsids, viral particles, bacterial cells,
CC   subcellular compartments, organelles and micelles, prokaryotic cells,
CC   eukaryotic cells, intracellular particles, nuclei, cell membranes, cell
CC   membrane fragments, nuclear membranes, nuclear membranes fragments, viral
CC   vectors or viral capsids with or without packaged nucleic acid, phage,
CC   phage vectors, phage capsids with or without encapsulated nucleotide
CC   acid, liposomes and other micellar agents. The biological particles are
CC   cells chosen from immune cells, neurons, cancer cells, bacterial cells
CC   and infected cells, subcellular compartment, organelles, viral particles
CC   or pathogens. The cells are dendritic cells, T cells, or B cells. The
CC   method is also useful for identifying molecules that interact with
CC   infectious agents, for profiling the surface of a biological particles,
CC   for identifying a modulator of an interaction among proteins in the
CC   biological particle, for identifying molecules that modulates the
CC   trafficking, activity or functional or structural property in the
CC   biological particle, and for mapping epitopes of molecules displayed on
CC   the surface of a biological particles. The method is also useful for
CC   sorting biological particles, for identifying a receptor on the surface
CC   of biological particle that transduces a signal from a polypeptide, and
CC   for identifying the molecule that interacts with an apically-localized
CC   molecule on a biological particle. The present sequence was used to
CC   illustrate the invention.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 12 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 23;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||| |||
Db          1 GAGGTGCAGCTGGTGGAGTCTG 22


RESULT 738
AAX59719
ID   AAX59719 standard; DNA; 24 BP.
XX
AC   AAX59719;
XX
DT   22-JUL-1999  (first entry)
XX
DE   Modified DNA oligonucleotide of the invention.
XX
KW   Oligodeoxyribonucleotide; intersubunit linkage;
KW   phosphoramidate intersubunit; antisense activity; nuclease resistant;
KW   in-vitro cell growth inhibition assay; infection;
KW   smooth muscle cell proliferation disorder; inflammatory process;
KW   genetic disorder; cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9525814-A1.
XX
PD   28-SEP-1995.
XX
PF   20-MAR-1995;   95WO-US003575.
XX
PR   18-MAR-1994;   94US-00210505.
PR   18-MAR-1994;   94US-00214599.
XX
PA   (LYNX-) LYNX THERAPEUTICS INC.
XX
PI   Gryaznov SM,  Schultz RG,  Chen J;
XX
DR   WPI; 1995-344627/44.
XX
PT   Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
PT   toward phosphodiesterase digestion, and form stable duplexes with DNA and
PT   RNA strands.
XX
PS   Disclosure; Page 54; 101pp; English.
XX
CC   The specification describes oligodeoxyribonucleotides having contiguous
CC   nucleoside subunits joined by intersubunit linkages, where at least 3
CC   contiguous subunits are joined by phosphoramidate intersubunits. The
CC   oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
CC   to form a duplex with a target nucleic acid molecule. The
CC   oligodeoxyribonucleotides are more resistant to nuclease digestion and
CC   have improved RNA and dsDNA hybridisation characteristics, relative to
CC   oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
CC   also have excellent antisense activity against complementary mRNA targets
CC   in in-vitro cell growth inhibition assays. They also exhibit low
CC   cytotoxicity. They may be used in diagnostic and therapeutic
CC   applications, e.g., in combatting infections agents such as bacteria,
CC   viruses, etc. or in treatment of smooth muscle cell proliferation
CC   disorders, inflammatory processes, certain genetic disorders, cancers,
CC   etc. . The present sequence represents an oligonucleotide of the invention
XX
SQ   Sequence 24 BP; 10 A; 0 C; 0 G; 14 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 24;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2823 TATATATACATATATATATATA 2844
              |||||||| | ||||||||||
Db          3 TATATATATTTTATATATATA 24


RESULT 739
AAX59721
ID   AAX59721 standard; DNA; 24 BP.
XX
AC   AAX59721;
XX
DT   22-JUL-1999  (first entry)
XX
DE   Modified oligonucleotide containing N3'-P5' phosphoramidates.
XX
KW   Oligodeoxyribonucleotide; intersubunit linkage;
KW   phosphoramidate intersubunit; antisense activity; nuclease resistant;
KW   in-vitro cell growth inhibition assay; infection;
KW   smooth muscle cell proliferation disorder; inflammatory process;
KW   genetic disorder; cancer; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .10
FT                   /*tag=  a
FT                   /note= "each base is linked by N3'-P5' phosphoramidate
FT                   linkages"
FT   modified_base   15. .24
FT                   /*tag=  a
FT                   /note= "each base is linked by N3'-P5' phosphoramidate
FT                   linkages"
XX
PN   WO9525814-A1.
XX
PD   28-SEP-1995.
XX
PF   20-MAR-1995;   95WO-US003575.
XX
PR   18-MAR-1994;   94US-00210505.
PR   18-MAR-1994;   94US-00214599.
XX
PA   (LYNX-) LYNX THERAPEUTICS INC.
XX
PI   Gryaznov SM,  Schultz RG,  Chen J;
XX
DR   WPI; 1995-344627/44.
XX
PT   Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
PT   toward phosphodiesterase digestion, and form stable duplexes with DNA and
```

```
PT   RNA strands.
XX
PS   Disclosure; Page 57; 101pp; English.
XX
CC   The specification describes oligodeoxyribonucleotides having contiguous
CC   nucleoside subunits joined by intersubunit linkages, where at least 3
CC   contiguous subunits are joined by phosphoramidate intersubunits. The
CC   oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
CC   to form a duplex with a target nucleic acid molecule. The
CC   oligodeoxyribonucleotides are more resistant to nuclease digestion and
CC   have improved RNA and dsDNA hybridisation characteristics, relative to
CC   oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
CC   also have excellent antisense activity against complementary mRNA targets
CC   in in-vitro cell growth inhibition assays. They also exhibit low
CC   cytotoxicity. They may be used in diagnostic and therapeutic
CC   applications, e.g., in combatting infections agents such as bacteria,
CC   viruses, etc. or in treatment of smooth muscle cell proliferation
CC   disorders, inflammatory processes, certain genetic disorders, cancers,
CC   etc. . The present sequence represents an oligonucleotide of the invention
XX
SQ   Sequence 24 BP; 10 A; 0 C; 0 G; 14 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 24;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2823 TATATATACATATATATATATA 2844
              ||||||||  | ||||||||||
Db          3 TATATATATTTTTATATATATA 24


RESULT 740
AAQ15061
ID   AAQ15061 standard; DNA; 24 BP.
XX
AC   AAQ15061;
XX
DT   25-MAR-2003  (revised)
DT   19-FEB-1992  (first entry)
XX
DE   T-cell receptor primer V-alpha 10.
XX
KW   TCR; multiple sclerosis; MS; brain; amplification; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9117268-A.
XX
PD   14-NOV-1991.
XX
PF   01-MAY-1990;   90US-00517245.
XX
PR   01-MAY-1990;   90US-00517245.
XX
PA   (STRD ) UNIV.LELAND STANFORD JUNIOR.
XX
PI   Steinman L,  Oksenberg J,  Bernard C;
XX
DR   WPI; 1991-353787/48.
XX
PT   Method for diagnosing T-cell associated disease - comprises identifying
PT   rearranged variable region of appropriate T-cell also T-cell compsns. for
PT   treating neo:proliferative conditions.
XX
PS   Disclosure; Page 31; 53pp; English.
XX
CC   TCR V-alpha and V-beta rearrangements were studied in 16 MS brains and in
CC   10 control brains. TCRValpha-Jalpha-Calpha and Vbeta-Dbeta- Jbeta-Cbeta
CC   rearrangements were confirmed with Southern blotting and hybridisation of
CC   the PCR product obtained by amplification with one of 18 Valpha or 21 of
CC   Vbeta specific oligonucleotide primers. See AAQ15052-92 for Valpha,
CC   Vbeta, Calpha and Cbeta primers. (Updated on 25-MAR-2003 to correct PA
CC   field.)
XX
SQ   Sequence 24 BP; 5 A; 9 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 24;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2240 ACCCTGCTGCTGGTGCACAGCC 2261
              ||||  |||||||| ||| ||||
Db          1 ACCCAGCTGCTGGAGCAGAGCC 22


RESULT 741
AAQ97706/c
ID   AAQ97706 standard; cDNA; 24 BP.
XX
AC   AAQ97706;
XX
DT   06-FEB-1996  (first entry)
XX
DE   Rat melanocortin receptor MC-5 amplification primer #3.
XX
KW   Rat; melanocortin receptor; probe; dopamine; striatum; human; primer;
KW   PCR; amplification; expression vector; cardiovascular; renal; motor;
KW   neurological; psychiatric; gastro-intestinal; neuro-endocrinal;
KW   arterial hypertension; disturbed intestinal function; secretory disorder;
KW   dysfunction; adrenal gland; ss.
XX
OS   Synthetic.
XX
PN   FR2713645-A1.
XX
PD   16-JUN-1995.
XX
PF   08-DEC-1993;   93FR-00014732.
XX
PR   08-DEC-1993;   93FR-00014732.
XX
PA   (INRM ) INST NAT SANTE & RECH MEDICALE.
XX
PI   Griffon N,  Sokoloff P,  Mignon V,  Diaz J,  Facchinetti P;
PI   Schwartz J;
XX
DR   WPI; 1995-217531/29.
XX
PT   New rat and human melanocortin receptor MC-5 - and related nucleic acid,
PT   transformed cells etc. useful for screening cpds. and for diagnosis and
PT   treatment of e.g. cardiovascular disease.
XX
PS   Example 3; Page 17; 37pp; French.
XX
CC   The primers and probes AAQ97705-8 were used to study the expression of
CC   the rat melanocortin receptor gene in rat brains. Primers AAQ97705-6 were
CC   used to PCR amplify a 225 bp fragment of the rat melanocortin receptor MC
CC   -5 coding sequence (AAQ97701). Detection of this fragment was carried out
CC   using the probes AAQ97707-8. Probes designed on the sequences of the rat
CC   or human (AAQ97702) receptor genes can be used in diagnosis of
CC   cardiovascular, renal, neurological, psychiatric, gastro-intestinal or
CC   neuro-endocrinal diseases (e.g. arterial hypertension, disturbed
CC   intestinal function, motor and secretory disorders, dysfunction of the
CC   adrenal gland, etc.) associated with qualitative or quantitative
CC   anomalies of the MC-5 receptor
XX
SQ   Sequence 24 BP; 4 A; 9 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 24;
  Best Local Similarity   86.4%;  Pred. No. 1.1e+03;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1351 ATGGAGATGATGAAGATGATCG 1372
              ||||||||||  | |||  |||||
Db         24 ATGGAGATGAGGCAGACGATCG 3
```

RESULT 742
AAT33122/c
ID AAT33122 standard; DNA; 17 BP.
XX
AC AAT33122;
XX
DT 07-NOV-1996 (first entry)
XX
DE 3' primer to amplify 160 bp probe for Tie gene.
XX
KW anti-Tie monoclonal antibody; extracellular domain; hybridoma;
KW Tyrosine kinase-Immunoglobulin like domain-EGF homology domain;
KW epidermal growth factor; leukaemia; diagnosis; separation;
KW haematopoietic stem cells; detection; primer; probe; PCR; amplify;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN JP08143598-A.
XX
PD 04-JUN-1996.
XX
PF 17-NOV-1994; 94JP-00308249.
XX
PR 17-NOV-1994; 94JP-00308249.
XX
PA (YAMA) YAMANOUCHI PHARM CO LTD.
XX
DR WPI; 1996-318959/32.
XX
PT Anti-Tie monoclonal antibody and hybridoma producing it - useful in
PT diagnosis of leukaemia and detection of haematopoietic stem cells.
XX
PS Example 1; Page 5; 19pp; Japanese.
XX
CC The invention concerns an anti-Tie (Tyrosine kinase-Immunoglobulin like
CC domain-EGF (epidermal growth factor) homology domain) monoclonal antibody
CC (MAb) which specifically recognises the Tie extracellular domain, and a
CC hybridoma producing it. The MAb can be used in the diagnosis of leukaemia
CC and also in separation and concentration of haematopoietic stem cells.
CC The MAb can also be used to detect and determine levels of (soluble) Tie.
CC AAT33121-22 are primers used to amplify a 160 bp probe based on a
CC tyrosine kinase domain, to detect the human Tie gene from a UT-7 cDNA
CC library. A 3933 bp cDNA clone, ptk-1, was identified, encoding a 1138
CC amino acid residue protein
XX
SQ Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1765 GAGGCCTTGTTTGACCG 1781
||||||||||||||||
Db 17 GAGGCCTTGTTTGACCG 1

RESULT 743
AAD17596
ID AAD17596 standard; DNA; 17 BP.
XX
AC AAD17596;
XX
DT 10-DEC-2001 (first entry)
XX
DE 5' variation generator oligonucleotide PCR primer #11.
XX
KW Genomic DNA analysis; 5' variation generator; 3' fragment generator;
KW endangered animal identification; PCR primer; ss.
XX
OS Unidentified.
XX
PN EP1130114-A1.
XX
PD 05-SEP-2001.
XX
PF 03-MAR-2000; 2000EP-00200757.
XX
PR 03-MAR-2000; 2000EP-00200757.
XX
PA (VHAE-) VAN HAERINGEN LAB BV.
XX
PI Van Haringen H, Van Haringen WA;
XX
DR WPI; 2001-572636/65.
XX
PT Analyzing genomic DNA in a sample, useful for analyzing genes of
PT organisms (e.g. a species or individual) or identifying endangered
PT animals or plants, by using oligonucleotide primers comprising universal
PT variable fragments.
XX
PS Example 1; Page 6; 23pp; English.
XX
CC The patent discloses a method and associated kit for analysing genomic
CC DNA in a sample. The method comprises conducting a nucleic acid
CC amplification on the genomic DNA in the sample using both first and
CC second oligonucleotide primer to produce DNA fragments based on repeat
CC sequences on at least one end of the genomic DNA. The first primer is a
CC 5' variation generator including a repeat sequence and at least one non-
CC repeat nucleotide. The second oligonucleotide primer is a 3' fragment
CC generator starting within such a genetic distance that amplification of
CC the genomic DNA can be performed and preferably includes inosine. The
CC method is useful for the genetic analysis of an individual organism,
CC particularly of a species or individual. It is also useful for the rapid
CC and straight forward identification of endangered animals or plants. The
CC present DNA sequence is a 5' variation generator oligonucleotide PCR
CC primer
XX
SQ Sequence 17 BP; 0 A; 1 C; 8 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2317 CTGTGTGTGTGTGTGTG 2333
||||||||||||||||
Db 1 CTGTGTGTGTGTGTGTG 17

RESULT 744
AAD17598/c
ID AAD17598 standard; DNA; 17 BP.
XX
AC AAD17598;
XX
DT 10-DEC-2001 (first entry)
XX
DE 5' variation generator oligonucleotide PCR primer #13.
XX
KW Genomic DNA analysis; 5' variation generator; 3' fragment generator;
KW endangered animal identification; PCR primer; ss.
XX
OS Unidentified.
XX
PN EP1130114-A1.
XX
PD 05-SEP-2001.
XX
PF 03-MAR-2000; 2000EP-00200757.
XX
PR 03-MAR-2000; 2000EP-00200757.
XX
PA (VHAE-) VAN HAERINGEN LAB BV.
XX
PI Van Haringen H, Van Haringen WA;

```
XX
DR   WPI; 2001-572636/65.
XX
PT   Analyzing genomic DNA in a sample, useful for analyzing genes of
PT   organisms (e.g. a species or individual) or identifying endangered
PT   animals or plants, by using oligonucleotide primers comprising universal
PT   variable fragments.
XX
PS   Example 1; Page 6; 23pp; English.
XX
CC   The patent discloses a method and associated kit for analysing genomic
CC   DNA in a sample. The method comprises conducting a nucleic acid
CC   amplification on the genomic DNA in the sample using both first and
CC   second oligonucleotide primer to produce DNA fragments based on repeat
CC   sequences on at least one end of the genomic DNA. The first primer is a
CC   5' variation generator including a repeat sequence and at least one non-
CC   repeat nucleotide. The second oligonucleotide primer is a 3' fragment
CC   generator starting within such a genetic distance that amplification of
CC   the genomic DNA can be performed and preferably includes inosine. The
CC   method is useful for the genetic analysis of an individual organism,
CC   particularly of a species or individual. It is also useful for the rapid
CC   and straight forward identification of endangered animals or plants. The
CC   present DNA sequence is a 5' variation generator oligonucleotide PCR
CC   primer
XX
SQ   Sequence 17 BP; 8 A; 8 C; 1 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2318 TGTGTGTGTGTGTGTGC 2334
              |||||||||||||||||
Db         17 TGTGTGTGTGTGTGTGC 1


RESULT 745
AAD34803
ID   AAD34803 standard; DNA; 17 BP.
XX
AC   AAD34803;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human FGFR3 allele detecting sense PCR primer.
XX
KW   Human; chondrodysplasia; achondroplasia; transgenic mouse; therapy;
KW   fibroblast growth factor receptor 3; FGFR3; limb; midface hypoplasia;
KW   large skull; drug screening; drug development; transgenic; PCR; primer;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US6265632-B1.
XX
PD   24-JUL-2001.
XX
PF   26-AUG-1999;   99US-00383630.
XX
PR   27-AUG-1998;   98IL-00125958.
XX
PA   (YEDA ) YEDA RES & DEV CO LTD.
PA   (PROC-) PROCHON BIOTECH LTD.
XX
PI   Yayon A,  Segev O;
XX
DR   WPI; 2001-463946/50.
XX
PT   New transgenic mice having a genetically modified fibroblast growth
PT   factor receptor gene, useful as a model for human chondrodysplasia, e.g.
PT   achondroplasia characterized by shortening of the limbs, midface
PT   hypoplasia or large skull.
XX
PS   Example; Col 14; 49pp; English.
XX
CC   The invention relates to an animal model for chondrodysplasia, more
CC   particularly, to a transgenic mouse model for achondroplasia. This
CC   transgenic mouse contains a fibroblast growth factor receptor 3 (FGFR3)
CC   gene including a G to A point mutation changing Gly to Arg in codon 380
CC   in its genome. The transgenic mouse is useful as a model for FGFR-
CC   associated chondrodysplasia, particularly FGFR3 achondroplasia, e.g.
CC   shortening of the limbs, midface hypoplasia and large skull. This model
CC   may be exploited to gain better understanding of the disease and as an
CC   experimental model with which experimental therapy to chondrodysplasias
CC   can be exercised. The transgenic mouse is particularly useful as a tool
CC   for screening, developing and evaluating drugs with a potential of
CC   relieving or abolishing chondrodysplasia syndromes and/or symptoms. The
CC   present sequence is a PCR primer used to detect human FGFR3 allele
XX
SQ   Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        455 CCTGCGTCGTGGAGAAC 471
              |||||||||||||||||
Db          1 CCTGCGTCGTGGAGAAC 17


RESULT 746
AAD55412
ID   AAD55412 standard; DNA; 17 BP.
XX
AC   AAD55412;
XX
DT   07-AUG-2003  (first entry)
XX
DE   Human FGFR-3 DNA specific forward PCR primer.
XX
KW   Human; antisense; fibroblast growth factor receptor 3; prophylaxis;
KW   developmental disorder; hyperproliferative disorder; antisense therapy;
KW   FGFR-3; ACH; JTK4; CEK2; cancer; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003023004-A2.
XX
PD   20-MAR-2003.
XX
PF   06-SEP-2002; 2002WO-US028549.
XX
PR   10-SEP-2001; 2001US-00953047.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Wyatt JR;
XX
DR   WPI; 2003-313244/30.
XX
PT   Novel compound targeted to a nucleic acid molecule encoding fibroblast
PT   growth factor receptor 3, useful for inhibiting the expression of the
PT   receptor and for treating an animal having cancer or developmental
PT   disorder.
XX
PS   Example 13; Page 76; 120pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   molecule encoding fibroblast growth factor (FGF) receptor 3 (also known
CC   as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense
CC   compounds of the invention are useful for treating diseases or conditions
CC   associated with FGFR-3 such as developmental disorders or
CC   hyperproliferative disorders, especially cancer of colorectal, bladder,
CC   bone, lung, cervical, breast or skin. They are useful as research
CC   reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools
CC   in differential and/or combinatorial analyses to elucidate expression
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CC   patterns of a portion of the genes expressed within cells and tissues.
CC   They are also useful in antisense therapy. The present sequence is human
CC   FGFR-3 DNA specific PCR primer. This primer is used in the
CC   exemplification of the invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1245 GGCCATCGGCATTGACA 1261
              |||||||||||||||||
Db          1 GGCCATCGGCATTGACA 17


RESULT 747
AAQ34125
ID   AAQ34125 standard; DNA; 18 BP.
XX
AC   AAQ34125;
XX
DT   25-MAR-2003  (revised)
DT   02-FEB-1993  (first entry)
XX
DE   Sequence of a microsatellite from clone TGLA69.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992;   92WO-US000340.
XX
PR   15-JAN-1991;   91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M,  Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
PT   mapping, and selective breeding.
XX
PS   Table 7; Page 381; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100, 000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          2 GTGTGTGTGTGTGTGTG 18


RESULT 748
AAQ33722
ID   AAQ33722 standard; DNA; 18 BP.
XX
AC   AAQ33722;
XX
DT   25-MAR-2003  (revised)
DT   02-FEB-1993  (first entry)
XX
DE   Microsatellite sequence from clone TGLA141.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992;   92WO-US000340.
XX
PR   15-JAN-1991;   91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M,  Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
PT   mapping, and selective breeding.
XX
PS   Table 7; Page 219; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100, 000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 749
AAQ33950
ID   AAQ33950 standard; DNA; 18 BP.
XX
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```
AC   AAQ33950;
XX
DT   25-MAR-2003  (revised)
DT   02-FEB-1993  (first entry)
XX
DE   Microsatellite sequence from clone TGLA346.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992;   92WO-US000340.
XX
PR   15-JAN-1991;   91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M,  Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
PT   mapping, and selective breeding.
XX
PS   Table 7; Page 310; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100, 000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          2 GTGTGTGTGTGTGTGTG 18


RESULT 750
AAQ33997
ID   AAQ33997 standard; DNA; 18 BP.
XX
AC   AAQ33997;
XX
DT   25-MAR-2003  (revised)
DT   02-FEB-1993  (first entry)
XX
DE   Microsatellite sequence from clone TGLA4.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992;   92WO-US000340.
XX
PR   15-JAN-1991;   91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M,  Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
PT   mapping, and selective breeding.
XX
PS   Table 7; Page 329; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100, 000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 751
AAQ46589
ID   AAQ46589 standard; DNA; 18 BP.
XX
AC   AAQ46589;
XX
DT   25-MAR-2003  (revised)
DT   10-MAR-2003  (revised)
DT   23-DEC-1993  (first entry)
XX
DE   Simple sequence repeat (GT)9.
XX
KW   Microsatellite; simple sequence repeat; SSR; polymorphism; variation;
KW   genetic marker; human genome; mapping; ligation reaction; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   repeat_region   1. .18
FT                   /*tag=  a
FT                   /note= "SSR"
FT   repeat_unit     1. .2
FT                   /*tag=  b
FT                   /rpt_type= TANDEM
```

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XX
PN   EP552545-A1.
XX
PD   28-JUL-1993.
XX
PF   09-DEC-1992;   92EP-00311242.
XX
PR   17-JAN-1992;   92US-00826930.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Grant D;
XX
DR   WPI; 1993-236281/30.
XX
PT   Detecting genetic variation between organisms - by detecting
PT   polymorphisms in simple sequence repeats in DNA of organisms.
XX
PS   Disclosure; Page 5; 8pp; English.
XX
CC   A (CA)9 simple sequence repeat is used to illustrate the novel method for
CC   detecting SSR polymorphisms without the need for direct sequencing or gel
CC   electrophoresis. The length of a particular repeat region (i.e. number of
CC   repeats) can be highly polymorphic; the sequences flanking the repeat
CC   region, however, are conserved. Detection of a SSR of a specific length
CC   is achieved by successful ligation of two oligonucleotides, one being
CC   exactly complementary to the repeat region and one of its conserved
CC   flanking sequences (i.e. comprising the sequence (GT)9) and the other
CC   being complementary to the other conserved flanking sequence. (Updated on
CC   10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct
CC   PN field.)
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 752
AAQ46588/c
ID   AAQ46588 standard; DNA; 18 BP.
XX
AC   AAQ46588;
XX
DT   25-MAR-2003  (revised)
DT   10-MAR-2003  (revised)
DT   23-DEC-1993  (first entry)
XX
DE   Simple sequence repeat (CA)9.
XX
KW   Microsatellite; simple sequence repeat; SSR; polymorphism; variation;
KW   genetic marker; human genome; mapping; ligation reaction; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   repeat_region   1. .18
FT                   /*tag=  a
FT                   /note= "SSR"
FT   repeat_unit     1. .2
FT                   /*tag=  b
FT                   /rpt_type= TANDEM
XX
PN   EP552545-A1.
XX
PD   28-JUL-1993.
XX
PF   09-DEC-1992;   92EP-00311242.
XX
PR   17-JAN-1992;   92US-00826930.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Grant D;
XX
DR   WPI; 1993-236281/30.
XX
PT   Detecting genetic variation between organisms - by detecting
PT   polymorphisms in simple sequence repeats in DNA of organisms.
XX
PS   Disclosure; Page 5; 8pp; English.
XX
CC   This (CA)9 simple sequence repeat is used to illustrate the novel method
CC   for detecting SSR polymorphisms without the need for direct sequencing or
CC   gel electrophoresis. The length of a particular repeat region (i.e.
CC   number of repeats) can be highly polymorphic; the sequences flanking the
CC   repeat region, however, are conserved. Detection of a SSR of a specific
CC   length is achieved by successful ligation of two oligonucleotides, one
CC   being exactly complementary to the repeat region and one of its conserved
CC   flanking sequences and the other being complementary to the other
CC   conserved flanking sequence. (Updated on 10-MAR-2003 to add missing OS
CC   field.) (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db         17 GTGTGTGTGTGTGTGTG 1


RESULT 753
AAV21968/c
ID   AAV21968 standard; DNA; 18 BP.
XX
AC   AAV21968;
XX
DT   14-JUL-1998  (first entry)
XX
DE   Nuclease resistant antisense oligo NBT 141 targeted against (AC)9.
XX
KW   Nuclease resistant; bacterial infection; antibiotic; target;
KW   veterinary medicine; treatment; human; industrial process;
KW   bacterial control; ss.
XX
OS   Synthetic.
XX
PN   WO9803533-A1.
XX
PD   29-JAN-1998.
XX
PF   23-JUL-1997;   97WO-US012961.
XX
PR   24-JUL-1996;   96US-00685575.
XX
PA   (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
XX
PI   Arrow A,  Dale RMK,  Thompson TL;
XX
DR   WPI; 1998-120687/11.
XX
PT   Treating bacterial infections in humans or animals with
PT   oligo:nucleotide(s) - resistant to nuclease and targetted to bacterial
PT   nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
PT   with antibiotics.
XX
PS   Claim 49; Page 87; 163pp; English.
XX
```

CC This antisense oligonucleotide is nuclease resistant and can be used in
CC the treatment of animals, including humans, having a bacterial infection.
CC The treatment comprises administration of such nuclease resistant
CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
CC and formulated with a carrier. A compound comprising this nuclease
CC resistant oligonucleotide can be covalently linked to an antibiotic. The
CC method is used to treat infections by a wide variety of Gram-positive and
CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
CC The methods are particularly used in immuno-compromised individuals (e.g.
CC patients with acquired immunodeficiency syndrome or those receiving
CC chemotherapy or radiation therapy), optionally in combination with, or
CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
CC therapeutic use, the oligonucleotides can be used to control bacteria in
CC laboratory cultures, foods, beverages and industrial processes. The
CC oligonucleotides are specific for bacteria, without affecting metabolism
CC in mammalian cells. They may also activate RNase H and have a general,
CC non-specific immune-stimulating effect. The oligonucleotides can be
CC administered orally, intranasally, rectally, topically or by injection,
CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
CC enhances cellular uptake
XX
SQ Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.6e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2335 GTGTGTGTGTGTGTGTG 2351
||||||||||||||||||
Db 18 GTGTGTGTGTGTGTGTG 2

RESULT 754
AAX77462/c
ID AAX77462 standard; DNA; 18 BP.
XX
AC AAX77462;
XX
DT 05-AUG-1999 (first entry)
XX
DE US5912147 primer 6.
XX
KW Primer; quantitation; genetic instability; tumour cell; detection;
KW neoplastic transformation; carcinogenesis; ss.
XX
OS Synthetic.
XX
PN US5912147-A.
XX
PD 15-JUN-1999.
XX
PF 22-OCT-1996; 96US-00734973.
XX
PR 22-OCT-1996; 96US-00734973.
XX
PA (HEAL-) HEALTH RES INC.
XX
PI Anderson G, Stoler D, Basik M;
XX
DR WPI; 1999-357197/30.
XX
PT Quantitating genetic instability.
XX
PS Claim 4; Col 17-18; 27pp; English.
XX
CC This invention describes a novel method for quantitating genetic
CC instability independent of microsatellite alterations by treating a
CC comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC from normal cells. The method involves the cells from the same individual
CC with oligonucleotide primers selected from (i) a nucleotide sequence
CC (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC 7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC 16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC adenine and guanine and Y is a pyrimidine selected from cytosine,
CC thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC where R is a purine selected from adenine and guanine and x = 6-16,
CC (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC of the primers. The method is useful for detecting genomic instability
CC which are commonly associated with the various stages of neoplastic
CC transformation and carcinogenesis. The method is rapid and simple
XX
SQ Sequence 18 BP; 8 A; 9 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.6e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2317 CTGTGTGTGTGTGTGTG 2333
||||||||||||||||||
Db 17 CTGTGTGTGTGTGTGTG 1

RESULT 755
AAX77487/c
ID AAX77487 standard; DNA; 18 BP.
XX
AC AAX77487;
XX
DT 05-AUG-1999 (first entry)
XX
DE US5912147 primer 31.
XX
KW Primer; quantitation; genetic instability; tumour cell; detection;
KW neoplastic transformation; carcinogenesis; ss.
XX
OS Synthetic.
XX
PN US5912147-A.
XX
PD 15-JUN-1999.
XX
PF 22-OCT-1996; 96US-00734973.
XX
PR 22-OCT-1996; 96US-00734973.
XX
PA (HEAL-) HEALTH RES INC.
XX
PI Anderson G, Stoler D, Basik M;
XX
DR WPI; 1999-357197/30.
XX
PT Quantitating genetic instability.
XX
PS Claim 4; Col 29-30; 27pp; English.
XX
CC This invention describes a novel method for quantitating genetic
CC instability independent of microsatellite alterations by treating a
CC comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC from normal cells. The method involves the cells from the same individual
CC with oligonucleotide primers selected from (i) a nucleotide sequence
CC (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC 7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC 16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC adenine and guanine and Y is a pyrimidine selected from cytosine,
CC thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,

```
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 8 A; 9 C; 0 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db         17 GTGTGTGTGTGTGTGTG 1


RESULT 756
AAX77486/c
ID   AAX77486 standard; DNA; 18 BP.
XX
AC   AAX77486;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 30.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; ss.
XX
OS   Synthetic.
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 29-30; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 8 A; 10 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db         17 GTGTGTGTGTGTGTGTG 1


RESULT 757
AAX77458/c
ID   AAX77458 standard; DNA; 18 BP.
XX
AC   AAX77458;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 2.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; ss.
XX
OS   Synthetic.
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 17-18; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 8 A; 8 C; 2 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2317 CTGTGTGTGTGTGTGTG 2333
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                 ||||||||||||||||||
Db         17 CTGTGTGTGTGTGTGTG 1


RESULT 758
AAX77464/c
ID   AAX77464 standard; DNA; 18 BP.
XX
AC   AAX77464;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 8.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; DNA/RNA hybrid; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_RNA        18
FT                   /*tag=  a
FT                   /note= "uracil"
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 19-20; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 8 A; 8 C; 1 G; 0 T; 1 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2317 CTGTGTGTGTGTGTGTG 2333
                ||||||||||||||||||
Db         17 CTGTGTGTGTGTGTGTG 1


RESULT 759
AAX77488/c
ID   AAX77488 standard; DNA; 18 BP.
XX
AC   AAX77488;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 32.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; DNA/RNA hybrid; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_RNA        18
FT                   /*tag=  a
FT                   /note= "uracil"
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 29-30; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 8 A; 9 C; 0 G; 0 T; 1 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
                ||||||||||||||||||
Db         17 GTGTGTGTGTGTGTGTG 1
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RESULT 760
AAX77463/c
ID   AAX77463 standard; DNA; 18 BP.
XX
AC   AAX77463;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 7.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; ss.
XX
OS   Synthetic.
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 19-20; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 8 A; 8 C; 1 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2317 CTGTGTGTGTGTGTGTG 2333
              |||||||||||||||||
Db         17 CTGTGTGTGTGTGTGTG 1


RESULT 761
AAX76437
ID   AAX76437 standard; DNA; 18 BP.
XX
AC   AAX76437;
XX
DT   05-AUG-1999  (first entry)
XX
DE   Sequencing reagent array oligonucleotide primer #28.
XX
KW   Sequencing reagent array; primer; capture moiety; hybridisation;
KW   detection; mutation; diagnosis; infectious disease; genetic disease; ss.
XX
OS   Synthetic.
XX
PN   WO9927137-A1.
XX
PD   03-JUN-1999.
XX
PF   20-NOV-1998;   98WO-US024966.
XX
PR   21-NOV-1997;   97US-00976427.
XX
PA   (ORCH-) ORCHID BIOCOMPUTER INC.
XX
PI   Head SR,  Goelet P,  Karn J,  Boyce-Jacino M;
XX
DR   WPI; 1999-357855/30.
XX
PT   Reagent for nucleic acid sequencing by primer extension, used to detect
PT   mutations and to diagnose infectious or genetic diseases.
XX
PS   Example 7; Page 27; 47pp; English.
XX
CC   The present invention describes a sequencing reagent (I) comprising: (a)
CC   a capture group (CG) that can form a stable complex with a region of a
CC   template nucleic acid (II); (b) spacer region (SR); and (c) sequence-
CC   specific hybridisation region (SSHR) of 4-8 bases able to hybridise to a
CC   complementary sequence on (II). Also described are: (1) array comprising
CC   an orderly arrangement of many (I), immobilized on a solid support; and
CC   (2) method of sequencing (II) using a combinatorial array of (I). Arrays
CC   of (I) are used for sequencing nucleic acids by a primer extension
CC   method, e.g. to scan for mutations (particularly single-nucleotide
CC   polymorphisms) and for diagnosis of infectious and genetic diseases.
CC   Arrays of (I) allow sequencing of templates without any prior knowledge
CC   of the wild-type or expected sequence. By separating the capture and
CC   specific hybridisation functions, it becomes possible to use smaller
CC   primers, simplifying array analysis, reducing costs and allowing
CC   thousands of hybridisation reactions to be done simultaneously.
CC   Particularly, 4 times fewer primers are required, compared with standard
CC   methods, i.e. since primer extension increases the effective length of
CC   the primer by 1 base, an array of n-mers will be as effective as an array
CC   of n+1-mers in usual methods. The method may be applied to single- or
CC   double-stranded DNA. AAX76410 to AAX76440 represent sequencing reagent
CC   array oligonucleotide primers used in an example from the present
CC   invention
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          2 GTGTGTGTGTGTGTGTG 18


RESULT 762
AAS13765
ID   AAS13765 standard; DNA; 18 BP.
XX
AC   AAS13765;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Simple sequence repeat, SSR, #37.
XX
KW   Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat;
KW   cereal profiling; grass profiling; seed batch purity testing.
```

```
XX
OS   Lolium multiflorum.
XX
PN   NZ509193-A.
XX
PD   25-MAY-2001.
XX
PF   03-JAN-2001; 2001NZ-00509193.
XX
PR   24-DEC-1999;   99AU-00004906.
PR   04-MAY-2000; 2000AU-00007310.
XX
PA   (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.
PA   (UYSC-) UNIV SOUTHERN CROSS.
PA   (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO.
PA   (UYAD-) UNIV ADELAIDE.
PA   (ITMA-) INT MAIZE & WHEAT IMPROVEMENT CENT.
XX
PI   Forster JW,  Jones ES;
XX
DR   WPI; 2001-512563/56.
XX
PT   New simple sequence repeats having 2 or more tandemly repeated nucleotide
PT   core elements isolated from ryegrass and fescue, useful for selecting of
PT   genes in grass or cereal breeding or profiling grass or cereal species
PT   varieties.
XX
PS   Example 1; Fig 6; 72pp; English.
XX
CC   The invention relates to a substantially purified or isolated nucleic
CC   acid (I) from ryegrass or fescue species including a simple sequence
CC   repeat (SSR), having 2 or more tandemly repeated nucleotide core elements
CC   2-6 nucleotides in length. Also included are a nucleic acid primer
CC   suitable for amplifying an SSR, identifying (M1) an SSR by preparing a
CC   library of ryegrass or fescue genomic DNA enriched for SSRs and
CC   identifying clones in the library containing SSRs, a library of ryegrass
CC   or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for
CC   a gene in grass or cereal breeding by identifying an SSR that is closely
CC   associated with the gene such that the SSR and the gene are
CC   preferentially co-inherited, and selecting for the SSR in the breeding, a
CC   method for DNA profiling grass or cereal species varieties by assessing
CC   variation between SSR varieties and testing the purity of grass or cereal
CC   seed batches by assessing variation within seed batch of an SSR. The SSRs
CC   may be used in the selection of genes in grass or cereal breeding, for
CC   profiling grass or cereal species varieties, for testing the purity of
CC   grass or cereal seed batches, and for DNA profiling to establish the
CC   distinct identity, uniformity and/or stability of a cultivar. The present
CC   sequence is a ryegrass or fescue SSR
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
                |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 763
AAS13732/c
ID   AAS13732 standard; DNA; 18 BP.
XX
AC   AAS13732;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Simple sequence repeat, SSR, #29.
XX
KW   Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat;
KW   cereal profiling; grass profiling; seed batch purity testing.
XX
OS   Poeae.
XX
PN   NZ509193-A.
XX
PD   25-MAY-2001.
XX
PF   03-JAN-2001; 2001NZ-00509193.
XX
PR   24-DEC-1999;   99AU-00004906.
PR   04-MAY-2000; 2000AU-00007310.
XX
PA   (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.
PA   (UYSC-) UNIV SOUTHERN CROSS.
PA   (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO.
PA   (UYAD-) UNIV ADELAIDE.
PA   (ITMA-) INT MAIZE & WHEAT IMPROVEMENT CENT.
XX
PI   Forster JW,  Jones ES;
XX
DR   WPI; 2001-512563/56.
XX
PT   New simple sequence repeats having 2 or more tandemly repeated nucleotide
PT   core elements isolated from ryegrass and fescue, useful for selecting of
PT   genes in grass or cereal breeding or profiling grass or cereal species
PT   varieties.
XX
PS   Claim 6; Page 51; 72pp; English.
XX
CC   The invention relates to a substantially purified or isolated nucleic
CC   acid (I) from ryegrass or fescue species including a simple sequence
CC   repeat (SSR), having 2 or more tandemly repeated nucleotide core elements
CC   2-6 nucleotides in length. Also included are a nucleic acid primer
CC   suitable for amplifying an SSR, identifying (M1) an SSR by preparing a
CC   library of ryegrass or fescue genomic DNA enriched for SSRs and
CC   identifying clones in the library containing SSRs, a library of ryegrass
CC   or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for
CC   a gene in grass or cereal breeding by identifying an SSR that is closely
CC   associated with the gene such that the SSR and the gene are
CC   preferentially co-inherited, and selecting for the SSR in the breeding, a
CC   method for DNA profiling grass or cereal species varieties by assessing
CC   variation between SSR varieties and testing the purity of grass or cereal
CC   seed batches by assessing variation within seed batch of an SSR. The SSRs
CC   may be used in the selection of genes in grass or cereal breeding, for
CC   profiling grass or cereal species varieties, for testing the purity of
CC   grass or cereal seed batches, and for DNA profiling to establish the
CC   distinct identity, uniformity and/or stability of a cultivar. The present
CC   sequence is a ryegrass or fescue SSR
XX
SQ   Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
                |||||||||||||||||
Db         17 GTGTGTGTGTGTGTGTG 1


RESULT 764
AAS13723/c
ID   AAS13723 standard; DNA; 18 BP.
XX
AC   AAS13723;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Simple sequence repeat, SSR, #20.
XX
KW   Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat;
KW   cereal profiling; grass profiling; seed batch purity testing.
XX
OS   Poeae.
```

```
XX
PN   NZ509193-A.
XX
PD   25-MAY-2001.
XX
PF   03-JAN-2001; 2001NZ-00509193.
XX
PR   24-DEC-1999;   99AU-00004906.
PR   04-MAY-2000; 2000AU-00007310.
XX
PA   (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.
PA   (UYSC-) UNIV SOUTHERN CROSS.
PA   (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO.
PA   (UYAD-) UNIV ADELAIDE.
PA   (ITMA-) INT MAIZE & WHEAT IMPROVEMENT CENT.
XX
PI   Forster JW,  Jones ES;
XX
DR   WPI; 2001-512563/56.
XX
PT   New simple sequence repeats having 2 or more tandemly repeated nucleotide
PT   core elements isolated from ryegrass and fescue, useful for selecting of
PT   genes in grass or cereal breeding or profiling grass or cereal species
PT   varieties.
XX
PS   Claim 6; Page 51; 72pp; English.
XX
CC   The invention relates to a substantially purified or isolated nucleic
CC   acid (I) from ryegrass or fescue species including a simple sequence
CC   repeat (SSR), having 2 or more tandemly repeated nucleotide core elements
CC   2-6 nucleotides in length. Also included are a nucleic acid primer
CC   suitable for amplifying an SSR, identifying (M1) an SSR by preparing a
CC   library of ryegrass or fescue genomic DNA enriched for SSRs and
CC   identifying clones in the library containing SSRs, a library of ryegrass
CC   or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for
CC   a gene in grass or cereal breeding by identifying an SSR that is closely
CC   associated with the gene such that the SSR and the gene are
CC   preferentially co-inherited, and selecting for the SSR in the breeding, a
CC   method for DNA profiling grass or cereal species varieties by assessing
CC   variation between SSR varieties and testing the purity of grass or cereal
CC   seed batches by assessing variation within seed batch of an SSR. The SSRs
CC   may be used in the selection of genes in grass or cereal breeding, for
CC   profiling grass or cereal species varieties, for testing the purity of
CC   grass or cereal seed batches, and for DNA profiling to establish the
CC   distinct identity, uniformity and/or stability of a cultivar. The present
CC   sequence is a ryegrass or fescue SSR
XX
SQ   Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db         18 GTGTGTGTGTGTGTGTG 2


RESULT 765
AAS13729
ID   AAS13729 standard; DNA; 18 BP.
XX
AC   AAS13729;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Simple sequence repeat, SSR, #26.
XX
KW   Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat;
KW   cereal profiling; grass profiling; seed batch purity testing.
XX
OS   Poeae.
XX
PN   NZ509193-A.
XX
PD   25-MAY-2001.
XX
PF   03-JAN-2001; 2001NZ-00509193.
XX
PR   24-DEC-1999;   99AU-00004906.
PR   04-MAY-2000; 2000AU-00007310.
XX
PA   (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.
PA   (UYSC-) UNIV SOUTHERN CROSS.
PA   (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO.
PA   (UYAD-) UNIV ADELAIDE.
PA   (ITMA-) INT MAIZE & WHEAT IMPROVEMENT CENT.
XX
PI   Forster JW,  Jones ES;
XX
DR   WPI; 2001-512563/56.
XX
PT   New simple sequence repeats having 2 or more tandemly repeated nucleotide
PT   core elements isolated from ryegrass and fescue, useful for selecting of
PT   genes in grass or cereal breeding or profiling grass or cereal species
PT   varieties.
XX
PS   Claim 6; Page 51; 72pp; English.
XX
CC   The invention relates to a substantially purified or isolated nucleic
CC   acid (I) from ryegrass or fescue species including a simple sequence
CC   repeat (SSR), having 2 or more tandemly repeated nucleotide core elements
CC   2-6 nucleotides in length. Also included are a nucleic acid primer
CC   suitable for amplifying an SSR, identifying (M1) an SSR by preparing a
CC   library of ryegrass or fescue genomic DNA enriched for SSRs and
CC   identifying clones in the library containing SSRs, a library of ryegrass
CC   or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for
CC   a gene in grass or cereal breeding by identifying an SSR that is closely
CC   associated with the gene such that the SSR and the gene are
CC   preferentially co-inherited, and selecting for the SSR in the breeding, a
CC   method for DNA profiling grass or cereal species varieties by assessing
CC   variation between SSR varieties and testing the purity of grass or cereal
CC   seed batches by assessing variation within seed batch of an SSR. The SSRs
CC   may be used in the selection of genes in grass or cereal breeding, for
CC   profiling grass or cereal species varieties, for testing the purity of
CC   grass or cereal seed batches, and for DNA profiling to establish the
CC   distinct identity, uniformity and/or stability of a cultivar. The present
CC   sequence is a ryegrass or fescue SSR
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 766
AAH46012
ID   AAH46012 standard; DNA; 18 BP.
XX
AC   AAH46012;
XX
DT   12-SEP-2001  (first entry)
XX
DE   Synthetic oligonucleotide 12.
XX
KW   Synthetic oligonucleotide; dinucleotide repeat; cytostatic; apoptosis;
KW   cell cycle arrest; cell proliferation; caspase; cytokine; interleukin;
KW   tumour necrosis factor; TNF; cancer; carcinoma; sarcoma; leukemia;
KW   lymphoma; ss.
XX
OS   Synthetic.
```

```
XX
PN   WO200144465-A2.
XX
PD   21-JUN-2001.
XX
PF   12-DEC-2000; 2000WO-CA001467.
XX
PR   13-DEC-1999;   99US-0170325P.
PR   29-AUG-2000; 2000US-0228925P.
XX
PA   (BION-) BIONICHE LIFE SCI INC.
XX
PI   Phillips NC,  Filion MC;
XX
DR   WPI; 2001-398150/42.
XX
PT   Composition comprising synthetic oligonucleotides which comprise multiple
PT   repeats of dinucleotides such as GT, TG useful for treating cancer by
PT   inducing cell cycle arrest, inhibiting proliferation, activating
PT   caspases.
XX
PS   Claim 5; Page 17; 77pp; English.
XX
CC   The present sequence is that of a synthetic oligonucleotide useful to the
CC   invention. The invention relates to a composition, comprising a 2 to 20
CC   base 3'-OH, 5'-OH synthetic oligonucleotide which comprises multiple
CC   repeats of dinucleotides such as GT, TG, etc., according to specific
CC   formula and having cytostatic activity. The oligonucleotide compositions
CC   are useful for inducing cell cycle arrest, inhibition of proliferation,
CC   activation of caspases and induction of apoptosis or production of
CC   cytokines such as interleukin (IL)-1-beta, IL-6, IL-10, IL-12 and tumour
CC   necrosis factor (TNF)-alpha by immune system cells, in an animal having
CC   cancer such as primary carcinoma, secondary carcinoma, primary sarcoma
CC   and secondary sarcoma such as, leukemia, lymphoma, breast, prostate,
CC   colorectal, ovarian or bone cancer. The compositions induce apoptosis
CC   independent of Fas, p53/p21, p21/waf-1/CIP, p15(ink4B), p16(ink4), drug
CC   resistance, caspase 3, transforming growth factor (TGF)-beta 1 receptor
CC   and hormone dependence
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 767
AAH46011
ID   AAH46011 standard; DNA; 18 BP.
XX
AC   AAH46011;
XX
DT   12-SEP-2001  (first entry)
XX
DE   Synthetic oligonucleotide 11.
XX
KW   Synthetic oligonucleotide; dinucleotide repeat; cytostatic; apoptosis;
KW   cell cycle arrest; cell proliferation; caspase; cytokine; interleukin;
KW   tumour necrosis factor; TNF; cancer; carcinoma; sarcoma; leukemia;
KW   lymphoma; ss.
XX
OS   Synthetic.
XX
PN   WO200144465-A2.
XX
PD   21-JUN-2001.
XX
PF   12-DEC-2000; 2000WO-CA001467.
XX
PR   13-DEC-1999;   99US-0170325P.
PR   29-AUG-2000; 2000US-0228925P.
XX
PA   (BION-) BIONICHE LIFE SCI INC.
XX
PI   Phillips NC,  Filion MC;
XX
DR   WPI; 2001-398150/42.
XX
PT   Composition comprising synthetic oligonucleotides which comprise multiple
PT   repeats of dinucleotides such as GT, TG useful for treating cancer by
PT   inducing cell cycle arrest, inhibiting proliferation, activating
PT   caspases.
XX
PS   Claim 5; Page 17; 77pp; English.
XX
CC   The present sequence is that of a synthetic oligonucleotide useful to the
CC   invention. The invention relates to a composition, comprising a 2 to 20
CC   base 3'-OH, 5'-OH synthetic oligonucleotide which comprises multiple
CC   repeats of dinucleotides such as GT, TG, etc., according to specific
CC   formula and having cytostatic activity. The oligonucleotide compositions
CC   are useful for inducing cell cycle arrest, inhibition of proliferation,
CC   activation of caspases and induction of apoptosis or production of
CC   cytokines such as interleukin (IL)-1-beta, IL-6, IL-10, IL-12 and tumour
CC   necrosis factor (TNF)-alpha by immune system cells, in an animal having
CC   cancer such as primary carcinoma, secondary carcinoma, primary sarcoma
CC   and secondary sarcoma such as, leukemia, lymphoma, breast, prostate,
CC   colorectal, ovarian or bone cancer. The compositions induce apoptosis
CC   independent of Fas, p53/p21, p21/waf-1/CIP, p15(ink4B), p16(ink4), drug
CC   resistance, caspase 3, transforming growth factor (TGF)-beta 1 receptor
CC   and hormone dependence
XX
SQ   Sequence 18 BP; 0 A; 0 C; 9 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.6e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          2 GTGTGTGTGTGTGTGTG 18


RESULT 768
AAH37514
ID   AAH37514 standard; DNA; 18 BP.
XX
AC   AAH37514;
XX
DT   14-AUG-2001  (first entry)
XX
DE   SNP specific lower PCR primer SEQ ID 310.
XX
KW   Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW   SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW   Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW   polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW   acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW   inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200129262-A2.
XX
PD   26-APR-2001.
XX
PF   13-OCT-2000; 2000WO-US028436.
XX
PR   15-OCT-1999;   99US-0160096P.
XX
PA   (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI   Picoult-Newburg L,  Pohl M;
```

XX
DR WPI; 2001-290930/30.
XX
PT New genotyping oligonucleotide, useful for detecting the presence,
PT absence or identity of single polynucleotide polymorphism in a nucleic
PT acid sample.
XX
PS Claim 1; Page 51; 83pp; English.
XX
CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence
XX
SQ Sequence 18 BP; 0 A; 2 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.6e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2319 GTGTGTGTGTGTGTGCG 2335
|||||||||||||||||
Db 1 GTGTGTGTGTGTGTGCG 17

RESULT 769
AAI64454/c
ID AAI64454 standard; DNA; 18 BP.
XX
AC AAI64454;
XX
DT 23-NOV-2001 (first entry)
XX
DE SSR motif #14.
XX
KW Simple Sequence Repeat; SSR; clover; microsatellite; genome mapping;
KW trait mapping; marker-assisted selection; gene selection; legume;
KW DNA profiling; breeding; ds.
XX
OS Unidentified.
XX
PN NZ509194-A.
XX
PD 25-MAY-2001.
XX
PF 03-JAN-2001; 2001NZ-00509194.
XX
PR 24-DEC-1999; 99AU-00004907.
PR 28-MAR-2000; 2000AU-00006520.
XX
PA (AGRI-) AGRIC VICTORIA SERVICES PTY LTD.
XX
PI Koelliker R, Forster JW;
XX
DR WPI; 2001-431058/46.
XX
PT Novel simple sequence repeats in clover species useful for selection of
PT genes in legume breeding, for profiling legume species varieties and for
PT testing the purity of legume seed batches.
XX
PS Claim 6; Page 35; 52pp; English.
XX
CC The present invention relates to Simple Sequence Repeats (SSRs) from
CC clover species. SSRs, also called microsatellites, are based on a 1-7
CC nucleotide core element which is tandemly repeated. The SSR array is
CC embedded in complex flanking DNA. SSRs are ideal markers for genome
CC mapping, trait mapping and marker-assisted selection. The SSRs may be
CC used in methods for selecting genes in clover/ legume breeding. The SSRs
CC are also useful for DNA profiling of clover varieties and for testing the
CC purity of legume seed batches. The present sequence is a SSR motif, which
CC was used in the present invention
XX
SQ Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.6e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2335 GTGTGTGTGTGTGTGTG 2351
|||||||||||||||||
Db 17 GTGTGTGTGTGTGTGTG 1

RESULT 770
ADO81096/c
ID ADO81096 standard; DNA; 18 BP.
XX
AC ADO81096;
XX
DT 29-JUL-2004 (first entry)
XX
DE Sheep prion protein microsatellite locus primer #67.
XX
KW gene typing; polymorphic microsatellite loci; PML;
KW disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
KW microsatellite; PCR; primer; ss.
XX
OS Ovis aries.
XX
PN DE10236711-A1.
XX
PD 26-FEB-2004.
XX
PF 09-AUG-2002; 2002DE-01036711.
XX
PR 09-AUG-2002; 2002DE-01036711.
XX
PA (UYHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
DR WPI; 2004-215730/21.
XX
PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.
XX
PS Example 3; Page 30; 64pp; German.
XX
CC The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for

CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the sheep prion
CC protein (PrP) comprising a polymorphic microsatellite locus.
XX
SQ Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.6e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2335 GTGTGTGTGTGTGTGTG 2351
|||||||||||||||||
Db 17 GTGTGTGTGTGTGTGTG 1

RESULT 771
ADI80140/c
ID ADI80140 standard; DNA; 20 BP.
XX
AC ADI80140;
XX
DT 22-APR-2004 (first entry)
XX
DE Mouse transforming growth factor-beta 2 antisense oligo, SEQ ID No 141.
XX
KW antisense; transforming growth factor; TGF; beta 2; TGF-beta 2;
KW cytostatic; nootropic; neuroprotective; immunosuppressive;
KW hyperproliferative disorder; cancer; neurodegenerative; hyperactivation;
KW immune; ss; mouse; murine.
XX
OS Mus musculus.
XX
PN US2004006030-A1.
XX
PD 08-JAN-2004.
XX
PF 02-JUL-2002; 2002US-00189267.
XX
PR 02-JUL-2002; 2002US-00189267.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Freier SM, Dobie KW;
XX
DR WPI; 2004-081742/08.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding TGF-beta 2, useful for treating cancer, a
PT neurodegenerative disorder, or a disease involving hyperactivation of
PT immune response.
XX
PS Example 16; SEQ ID NO 141; 135pp; English.
XX
CC The invention relates to a novel antisense compound of 8-80 nucleobases
CC in length targeted to, and which specifically hybridizes with, a nucleic
CC acid molecule encoding transforming growth factor (TGF)-beta 2, and
CC inhibits the expression of TGF-beta 2. The invention further relates to:
CC a compound 8-80 nucleobases in length that specifically hybridizes with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding TGF-beta 2; a composition comprising the compound and a
CC carrier or diluent; inhibiting the expression of TGF-beta 2 in cells or
CC tissues by contacting the cells or tissues with the compound so that
CC expression of TGF-beta 2 is inhibited; treating an animal having a
CC disease or condition associated with TGF-beta 2 by administering to the
CC animal a therapeutic or prophylactic amount of the compound so that
CC expression of TGF-beta 2 is inhibited; and screening an antisense
CC compound. The antisense compound has cytostatic, nootropic,
CC neuroprotective, and immunosuppressive activities. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with TGF-beta 2, such as a hyperproliferative disorder e.g.
CC cancer, a neurodegenerative disorder, or a disease or condition involving
CC hyperactivation of an immune response. This polynucleotide sequence
CC represents an antisense oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3377 TTGCTGTGTGTCCCAGG 3393
|||||||||||||||||
Db 18 TTGCTGTGTGTCCCAGG 2

RESULT 772
ADI80261
ID ADI80261 standard; DNA; 20 BP.
XX
AC ADI80261;
XX
DT 22-APR-2004 (first entry)
XX
DE Mouse transforming growth factor-beta 2 target DNA region, SEQ ID No 262.
XX
KW antisense; transforming growth factor; TGF; beta 2; TGF-beta 2;
KW cytostatic; nootropic; neuroprotective; immunosuppressive;
KW hyperproliferative disorder; cancer; neurodegenerative; hyperactivation;
KW immune; ss; mouse; murine.
XX
OS Mus musculus.
XX
PN US2004006030-A1.
XX
PD 08-JAN-2004.
XX
PF 02-JUL-2002; 2002US-00189267.
XX
PR 02-JUL-2002; 2002US-00189267.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Freier SM, Dobie KW;
XX
DR WPI; 2004-081742/08.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding TGF-beta 2, useful for treating cancer, a
PT neurodegenerative disorder, or a disease involving hyperactivation of
PT immune response.
XX
PS Example 16; SEQ ID NO 262; 135pp; English.
XX
CC The invention relates to a novel antisense compound of 8-80 nucleobases
CC in length targeted to, and which specifically hybridizes with, a nucleic
CC acid molecule encoding transforming growth factor (TGF)-beta 2, and
CC inhibits the expression of TGF-beta 2. The invention further relates to:
CC a compound 8-80 nucleobases in length that specifically hybridizes with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding TGF-beta 2; a composition comprising the compound and a
CC carrier or diluent; inhibiting the expression of TGF-beta 2 in cells or
CC tissues by contacting the cells or tissues with the compound so that
CC expression of TGF-beta 2 is inhibited; treating an animal having a
CC disease or condition associated with TGF-beta 2 by administering to the
CC animal a therapeutic or prophylactic amount of the compound so that
CC expression of TGF-beta 2 is inhibited; and screening an antisense
CC compound. The antisense compound has cytostatic, nootropic,
CC neuroprotective, and immunosuppressive activities. The compound,

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CC   composition and methods are useful for treating a disease or condition
CC   associated with TGF-beta 2, such as a hyperproliferative disorder e.g.
CC   cancer, a neurodegenerative disorder, or a disease or condition involving
CC   hyperactivation of an immune response. This polynucleotide sequence
CC   represents a preferred target DNA region of TGF-beta 2 of the invention.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.7e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3377 TTGCTGTGTGTCCCAGG 3393
              |||||||||||||||||
Db          3 TTGCTGTGTGTCCCAGG 19


RESULT 773
ADM15004/c
ID   ADM15004 standard; DNA; 20 BP.
XX
AC   ADM15004;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1191.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 1191; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 11 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.7e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db         20 GTGTGTGTGTGTGTGTG 4


RESULT 774
ADO40832/c
ID   ADO40832 standard; DNA; 20 BP.
XX
AC   ADO40832;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human CRLR gene 5' flanking region PCR primer #2.
XX
KW   human; ss; primer; calcitonin receptor-like receptor; CRLR; hypertension;
KW   glucocorticoid administration; tumour; vasodilation; angiogenesis;
KW   gene therapy; PCR.
XX
OS   Homo sapiens.
XX
PN   WO2004044581-A2.
XX
PD   27-MAY-2004.
XX
PF   13-NOV-2003; 2003WO-GB004930.
XX
PR   13-NOV-2002; 2002GB-00026497.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Mackenzie I,  Rees CMP,  Nikitenko LL,  Bicknell R,  Smith DM;
XX
DR   WPI; 2004-411760/38.
XX
PT   Use of calcitonin receptor-like receptor (CRLR) genes for determining if
PT   a test compound can regulate expression of CRLR gene, for screening a
PT   test compound to counteract hypertension in glucocorticoid administration
PT   or for tumor therapy.
XX
PS   Example 4; Page 24; 43pp; English.
XX
CC   The invention relates to the use of the calcitonin receptor-like receptor
CC   (CRLR) gene for determining whether a test compound can regulate
CC   expression of CRLR gene, screening a test compound for ability to
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CC   counteract hypertension in the course of glucocorticoid administration to
CC   a patient, diagnosing a lesion as a tumour, reducing the hypertensive
CC   side effect of a glucocorticoid administration regime in a patient, or
CC   for tumour therapy. The agents, e.g. adrenomedullin, CGRP or functional
CC   analogues of the peptides are useful in manufacture of a preparation for
CC   reducing the hypertensive side effect of a glucocorticoid administration
CC   regime. The compound that up-regulates CRLR gene expression or the up-
CC   regulator of CRLR gene promoter activity is also useful in the
CC   manufacture of a preparation for reducing the hypertensive side-effect of
CC   a glucocorticoid administration regime or for treating a condition where
CC   it is desired to promote vasodilation and/or angiogenesis. The compound
CC   that down-regulates CRLR expression in microvascular endothelial cells
CC   under hypoxic conditions is useful in the manufacture of a medicament for
CC   use in tumour therapy, e.g. a patient identified as having a tumour
CC   exhibiting elevated CRLR or elevated corresponding mRNA. It is also
CC   useful in the manufacture of a combined preparation for simultaneous,
CC   sequential or combined administration of the compound with an
CC   adrenomedullin binding inhibitor for tumour therapy. Glucocorticoid, or
CC   an analogue is useful in the manufacture of a preparation for up-
CC   regulating the CRLR gene promoter in micro vascular endothelial cells or
CC   for up-regulating a glucocorticoid responsive promoter derived from a
CC   CRLR gene in a vector administered for gene therapy. The compound
CC   identifiable or identified as an up-regulator of CRLR gene promoter
CC   activity is useful in the manufacture of a product for use in up-
CC   regulating a glucocorticoid responsive promoter derived from a CRLR gene
CC   in a vector administered for gene therapy. The present sequence
CC   represents a human calcitonin receptor-like receptor, CRLR, gene 5'
CC   flanking region PCR primer.
XX
SQ   Sequence 20 BP; 8 A; 10 C; 1 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.7e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2333 GCGTGTGTGTGTGTGTG 2349
              |||||||||||||||||
Db         17 GCGTGTGTGTGTGTGTG 1


RESULT 775
ADP45829
ID   ADP45829 standard; DNA; 20 BP.
XX
AC   ADP45829;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Extend primer 21 used to genotype human ICAM-1/ICAM-4/ICAM-5 SNP.
XX
KW   breast cancer; cytostatic; gene therapy; human;
KW   intercellular adhesion molecule; ICAM-1; human rhinovirus receptor; BB2;
KW   CD54; cell surface glycoprotein P3.58; ICAM-4;
KW   Landsteiner-Wiener blood group; ICAM-5; telencephalin; chromosome 19p13;
KW   ss; primer; PCR; SNP; single nucleotide polymorphism; probe.
XX
OS   Homo sapiens.
XX
PN   WO2004047623-A2.
XX
PD   10-JUN-2004.
XX
PF   25-NOV-2003; 2003WO-US037948.
XX
PR   25-NOV-2002; 2002US-0429136P.
PR   24-JUL-2003; 2003US-0490234P.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Roth RB,  Nelson MR,  Braun A,  Kammerer SM,  Reneland R;
XX
DR   WPI; 2004-441051/41.
XX
PT   Identifying a subject at risk of breast cancer by detecting the presence
PT   of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE
PT   regions which are associated with breast cancer in a nucleic acid sample
PT   from a subject.
XX
PS   Example 4; Page 83; 289pp; English.
XX
CC   The invention relates to a novel method for identifying a subject at risk
CC   of breast cancer comprising detecting the presence or absence of one or
CC   more polymorphic variations associated with breast cancer in a nucleic
CC   acid sample from a subject. The method of the invention has cytostatic
CC   applications and may be useful for identifying a subject at risk of
CC   breast cancer, for early diagnosis, prevention and treatment of breast
CC   cancer, possibly via gene therapy, as well as to analyse and predict a
CC   response to a breast cancer treatment and in clinical drug trials. The
CC   current sequence is that of an Extend primer (also described as probe) of
CC   the invention which was used to genotype human intercellular adhesion
CC   molecule ICAM-1/ICAM-4/ICAM-5 gDNA. ICAM-1 (human rhinovirus receptor;BB2
CC   ;CD54;cell surface glycoprotein P3.58) has been mapped to chromosomal
CC   position 19p13.3-p13.2, ICAM-4 (Landsteiner-Wiener blood group;LW) has
CC   been mapped to chromosomal position 19p13.2-cen and ICAM-5
CC   (telencephalin) has been mapped to chromosomal position 19p13.2.
XX
SQ   Sequence 20 BP; 1 A; 1 C; 10 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.7e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2329 GTGTGCGTGTGTGTGTG 2345
              |||||||||||||||||
Db          4 GTGTGCGTGTGTGTGTG 20


RESULT 776
AAQ34146
ID   AAQ34146 standard; DNA; 23 BP.
XX
AC   AAQ34146;
XX
DT   25-MAR-2003  (revised)
DT   02-FEB-1993  (first entry)
XX
DE   Sequence of a microsatellite from clone TGLA77.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992;   92WO-US000340.
XX
PR   15-JAN-1991;   91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M,  Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
PT   mapping, and selective breeding.
XX
PS   Table 7; Page 389; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
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CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100, 000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 23 BP; 0 A; 0 C; 12 G; 11 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||
Db          1 GTGTGTGTGTGTGTGTG 17


RESULT 777
AAQ75505/c
ID   AAQ75505 standard; DNA; 24 BP.
XX
AC   AAQ75505;
XX
DT   25-MAR-2003  (revised)
DT   28-JUN-1995  (first entry)
XX
DE   Capture probe CAP267.
XX
KW   Human papilloma virus; HPV; HPV16; HPV18; diagnosis; primer;
KW   capture probe; hybridization; self-sustained sequence replication; 3SR;
KW   E6 protein; E7 protein; cervical dysplasia; cervix cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9426934-A2.
XX
PD   24-NOV-1994.
XX
PF   06-MAY-1994;   94WO-US005085.
XX
PR   06-MAY-1993;   93US-00058920.
XX
PA   (BAXT ) BAXTER DIAGNOSTICS INC.
XX
PI   Brown JT;
XX
DR   WPI; 1995-006821/01.
XX
PT   Human papilloma virus detection assay - by amplification using self
PT   sustained sequence replication and hybridisation with a detector probe.
XX
PS   Disclosure; Page 16; 79pp; English.
XX
CC   Self-sustained sequence replication is performed on HPV E6/E7 region mRNA
CC   using 2 primers, one of which contains a transcriptional promoter, pref.
CC   the phage T7 RNA-polymerase binding site (AAQ75512). Suitable primers are
CC   given in AAQ75472-500. Amplified sequences are hybridized to capture
CC   probes (AAQ75501-05), and hybridization is detected using detection
CC   probes (AAQ75506-09, AAQ86975). Expression of E6/E7 is diagnostic for
CC   cervical cancer or pre-malignancy states. (Updated on 25-MAR-2003 to
CC   correct PN field.)
XX
SQ   Sequence 24 BP; 9 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2988 TTTTTCTGGCACCGCAG 3004
              |||||||||||||||||
Db         21 TTTTTCTGGCACCGCAG 5


RESULT 778
AAQ44813/c
ID   AAQ44813 standard; DNA; 20 BP.
XX
AC   AAQ44813;
XX
DT   25-MAR-2003  (revised)
DT   28-SEP-1994  (first entry)
XX
DE   Pur-specific RACE primer EX-990.
XX
KW   Single-strand binding protein; PUR protein; cellular oncogene;
KW   eukaryotic origin of replication; gene amplification; cancer cell;
KW   retinoblastoma protein; helix-destabilising protein; inhibitor;
KW   hyperproliferation; c-myc; rapid amplification of cDNA ends; ss.
XX
OS   Synthetic.
XX
PN   WO9405689-A1.
XX
PD   17-MAR-1994.
XX
PF   27-AUG-1993;   93WO-US008102.
XX
PR   28-AUG-1992;   92US-00938189.
PR   02-FEB-1993;   93US-00014943.
XX
PA   (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI   Johnson EM,  Bergemann AD;
XX
DR   WPI; 1994-101114/12.
XX
PT   Cloning and expression of PUR protein, involved in regulation of DNA
PT   replication - also oligo:nucleotide(s) and antibodies for use in the
PT   treatment of proliferative diseases, e.g. cancer.
XX
PS   Example 1; Page 11; 97pp; English.
XX
CC   Poly (A)+ RNA isolated from HepG2 cells was subjected to Rapid
CC   Amplification of cDNA Ends (RACE) using Pur-specific primers AAQ44810-
CC   Q44813 as part of the procedure for characterising the PUR protein. (The
CC   PUR protein was originally identified as a 27kD HeLa cell nuclear factor
CC   that bound in a sequence-specific manner to single-stranded PUR
CC   elements). (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 20 BP; 9 A; 8 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2329 GTGTGCGTGTGTGTGTGTGT 2348
              || ||| ||||||||||||||
Db         20 GTATGCATGTGTGTGTGTGT 1


RESULT 779
AAX59720
ID   AAX59720 standard; DNA; 20 BP.
XX
AC   AAX59720;
XX
DT   22-JUL-1999  (first entry)
XX
DE   Modified oligonucleotide containing N3'-P5' phosphoramidates.
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```
XX
KW   Oligodeoxyribonucleotide; intersubunit linkage;
KW   phosphoramidate intersubunit; antisense activity; nuclease resistant;
KW   in-vitro cell growth inhibition assay; infection;
KW   smooth muscle cell proliferation disorder; inflammatory process;
KW   genetic disorder; cancer; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .8
FT                   /*tag=  a
FT                   /note= "each base is linked by N3'-P5' phosphoramidate
FT                   linkages"
XX
PN   WO9525814-A1.
XX
PD   28-SEP-1995.
XX
PF   20-MAR-1995;   95WO-US003575.
XX
PR   18-MAR-1994;   94US-00210505.
PR   18-MAR-1994;   94US-00214599.
XX
PA   (LYNX-) LYNX THERAPEUTICS INC.
XX
PI   Gryaznov SM,  Schultz RG,  Chen J;
XX
DR   WPI; 1995-344627/44.
XX
PT   Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
PT   toward phosphodiesterase digestion, and form stable duplexes with DNA and
PT   RNA strands.
XX
PS   Disclosure; Page 55; 101pp; English.
XX
CC   The specification describes oligodeoxyribonucleotides having contiguous
CC   nucleoside subunits joined by intersubunit linkages, where at least 3
CC   contiguous subunits are joined by phosphoramidate intersubunits. The
CC   oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
CC   to form a duplex with a target nucleic acid molecule. The
CC   oligodeoxyribonucleotides are more resistant to nuclease digestion and
CC   have improved RNA and dsDNA hybridisation characteristics, relative to
CC   oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
CC   also have excellent antisense activity against complementary mRNA targets
CC   in in-vitro cell growth inhibition assays. They also exhibit low
CC   cytotoxicity. They may be used in diagnostic and therapeutic
CC   applications, e.g., in combatting infections agents such as bacteria,
CC   viruses, etc. or in treatment of smooth muscle cell proliferation
CC   disorders, inflammatory processes, certain genetic disorders, cancers,
CC   etc. . The present sequence represents an oligonucleotide of the invention
XX
SQ   Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

  Query Match           0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3463 TATATATATCTATATATATA 3482
              ||||||||| | ||||||||
Db          1 TATATATATTTTTATATATA 20


RESULT 780
AAX59720/c
ID   AAX59720 standard; DNA; 20 BP.
XX
AC   AAX59720;
XX
DT   22-JUL-1999  (first entry)
XX
DE   Modified oligonucleotide containing N3'-P5' phosphoramidates.
XX
KW   Oligodeoxyribonucleotide; intersubunit linkage;
KW   phosphoramidate intersubunit; antisense activity; nuclease resistant;
KW   in-vitro cell growth inhibition assay; infection;
KW   smooth muscle cell proliferation disorder; inflammatory process;
KW   genetic disorder; cancer; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .8
FT                   /*tag=  a
FT                   /note= "each base is linked by N3'-P5' phosphoramidate
FT                   linkages"
XX
PN   WO9525814-A1.
XX
PD   28-SEP-1995.
XX
PF   20-MAR-1995;   95WO-US003575.
XX
PR   18-MAR-1994;   94US-00210505.
PR   18-MAR-1994;   94US-00214599.
XX
PA   (LYNX-) LYNX THERAPEUTICS INC.
XX
PI   Gryaznov SM,  Schultz RG,  Chen J;
XX
DR   WPI; 1995-344627/44.
XX
PT   Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
PT   toward phosphodiesterase digestion, and form stable duplexes with DNA and
PT   RNA strands.
XX
PS   Disclosure; Page 55; 101pp; English.
XX
CC   The specification describes oligodeoxyribonucleotides having contiguous
CC   nucleoside subunits joined by intersubunit linkages, where at least 3
CC   contiguous subunits are joined by phosphoramidate intersubunits. The
CC   oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
CC   to form a duplex with a target nucleic acid molecule. The
CC   oligodeoxyribonucleotides are more resistant to nuclease digestion and
CC   have improved RNA and dsDNA hybridisation characteristics, relative to
CC   oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
CC   also have excellent antisense activity against complementary mRNA targets
CC   in in-vitro cell growth inhibition assays. They also exhibit low
CC   cytotoxicity. They may be used in diagnostic and therapeutic
CC   applications, e.g., in combatting infections agents such as bacteria,
CC   viruses, etc. or in treatment of smooth muscle cell proliferation
CC   disorders, inflammatory processes, certain genetic disorders, cancers,
CC   etc. . The present sequence represents an oligonucleotide of the invention
XX
SQ   Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

  Query Match           0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2823 TATATATACATATATATATA 2842
              ||||||||| | ||||||||
Db         20 TATATATAAAAATATATATA 1


RESULT 781
AAV01155
ID   AAV01155 standard; DNA; 20 BP.
XX
AC   AAV01155;
XX
DT   23-MAR-1998  (first entry)
XX
DE   c-KIT protooncogene PCR primer for universal mammalian STS's.
XX
KW   PCR primer; polymerase chain reaction; amplification; UM-STS;
```

```
KW   universal mammalian sequence tagged site; genomic map; clone; ss.
XX
OS   Synthetic.
XX
PN   WO9731012-A1.
XX
PD   28-AUG-1997.
XX
PF   18-FEB-1997;   97WO-US002403.
XX
PR   22-FEB-1996;   96US-0012061P.
XX
PA   (UNMI ) UNIV MICHIGAN.
PA   (UNMS ) UNIV MICHIGAN STATE.
XX
PI   Brewer GJ,  Venta PJ,  Yuzbasiyan-Gurkan V;
XX
DR   WPI; 1997-435083/40.
XX
PT   New oligonucleotide primers amplifying gene regions conserved among
PT   mammals - useful for developing genomic maps, isolating clones and making
PT   cross-species comparisons.
XX
PS   Claim 1; Page 9; 26pp; English.
XX
CC   The present sequence represents a specifically claimed oligonucleotide
CC   PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC   (PCR) amplification of DNA, specifically regions of specific genes that
CC   are conserved among mammalian species, i.e. pairs of oligonucleotides
CC   from the present specification represent universal mammalian sequence-
CC   tagged site (UM-STS) primers. The primers are used to develop genomic
CC   maps, to isolate clones from libraries, to make cross-species comparisons
CC   and to develop additional genetic markers. UM-STS allow genomic
CC   comparisons to be made between more species
XX
SQ   Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1744 CCCGTGAAGTGGATGGCGCC 1763
              || |||||||||||||| ||
Db          1 CCTGTGAAGTGGATGGCACC 20


RESULT 782
AAT99269/c
ID   AAT99269 standard; DNA; 20 BP.
XX
AC   AAT99269;
XX
DT   15-APR-1998  (first entry)
XX
DE   Human PUR-alpha gene primer EX-990.
XX
KW   PUR element; human; c-myc; inhibitor; hyperproliferative disease; ss;
KW   cancer; PCR; primer; amplification.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5672479-A.
XX
PD   30-SEP-1997.
XX
PF   07-JUN-1995;   95US-00486421.
XX
PR   28-AUG-1992;   92US-00938189.
PR   02-FEB-1993;   93US-00014943.
PR   06-JUN-1995;   95US-00470911.
XX
PA   (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI   Bergemann AD,  Johnson EM;
XX
DR   WPI; 1997-488859/45.
XX
PT   Assays for PUR protein ligands or modulators - using immobilised PUR
PT   protein or fragments, to treat hyper-proliferative diseases, e.g. cancer.
XX
PS   Disclosure; Col 9; 64pp; English.
XX
CC   The primers AAT99265-T99269 were used to PCR amplify and isolate the
CC   complete sequence of the human PUR-alpha gene (AAT99264). This primer
CC   corresponds to nucleotides 990-1009 of the PUR sequence. The PUR sequence
CC   can be used to identify chemical or biological compounds that bind to PUR
CC   or binding fragments of PUR. Inhibitors of PUR activity may be used to
CC   treat hyperproliferative diseases such as cancer
XX
SQ   Sequence 20 BP; 9 A; 8 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2329 GTGTGCGTGTGTGTGTGTGT 2348
              || ||| ||||||||||||||
Db         20 GTATGCATGTGTGTGTGTGT 1


RESULT 783
AAV31725/c
ID   AAV31725 standard; DNA; 20 BP.
XX
AC   AAV31725;
XX
DT   24-SEP-1998  (first entry)
XX
DE   Nucleotide sequence of the PUR specific PCR primer Ex-990.
XX
KW   PUR-alpha gene; inhibition; viral infection; cancer; PCR; primer;
KW   hyperproliferative disease; amplification; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5756684-A.
XX
PD   26-MAY-1998.
XX
PF   06-JUN-1995;   95US-00470911.
XX
PR   28-AUG-1992;   92US-00938189.
PR   02-FEB-1993;   93US-00014943.
XX
PA   (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI   Bergemann AD,  Johnson EM;
XX
DR   WPI; 1998-321632/28.
XX
PT   PUR protein and its fragments - that inhibit PUR protein binding to PUR
PT   element or other proteins.
XX
PS   Disclosure; Col 9; 63pp; English.
XX
CC   This is the nucleotide sequence of the PUR psecific PCR primer used for
CC   amplification in the method of the invention, involving the use of the
CC   PUR protein and its fragments, which inhibit PUR protein binding to PUR
CC   element or other proteins. Inhibitors of PUR activity may be useful for
CC   treating viral infections and hyperproliferative diseases such as cancer
XX
SQ   Sequence 20 BP; 9 A; 8 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
```

```
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2329 GTGTGCGTGTGTGTGTGTGT 2348
              || ||| ||||||||||||||
Db         20 GTATGCATGTGTGTGTGTGT 1


RESULT 784
AAX04091/c
ID   AAX04091 standard; DNA; 20 BP.
XX
AC   AAX04091;
XX
DT   12-APR-1999  (first entry)
XX
DE   PUR-alpha RACE reaction primer EX-990.
XX
KW   PUR element; PUR-alpha; hyperproliferative disease; cancer; human;
KW   monoclonal antibody; identification; characterisation; RACE primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5869622-A.
XX
PD   09-FEB-1999.
XX
PF   07-JUN-1995;   95US-00486809.
XX
PR   28-AUG-1992;   92US-00938189.
PR   02-FEB-1993;   93US-00014943.
PR   06-JUN-1995;   95US-00470911.
XX
PA   (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI   Bergemann AD,  Johnson EM;
XX
DR   WPI; 1999-152881/13.
XX
PT   Monoclonal antibody specific for PUR protein - useful for treating
PT   cancer.
XX
PS   Example; Col 10; 64pp; English.
XX
CC   The present invention describes a monoclonal antibody that specifically
CC   binds to an epitope of the PUR protein. Antibodies that bind to the PUR
CC   protein and neutralise PUR activity may be used to treat
CC   hyperproliferative diseases such as cancer. PUR antibodies may be used
CC   diagnostically to detect aberrant expression of the PUR protein and/or
CC   mutations in the PUR gene. The present sequence represents a PUR-alpha
CC   RACE primer which is used in an example from the present invention
XX
SQ   Sequence 20 BP; 9 A; 8 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2329 GTGTGCGTGTGTGTGTGTGT 2348
              || ||| ||||||||||||||
Db         20 GTATGCATGTGTGTGTGTGT 1


RESULT 785
AAZ98503/c
ID   AAZ98503 standard; DNA; 20 BP.
XX
AC   AAZ98503;
XX
DT   19-JUN-2000  (first entry)
XX
DE   H. discus derived sequence #21.
XX
KW   Satellite sequence; DNA fragmentation; microsatellite DNA; DNA marker;
KW   Haliotis discus; ss.
XX
OS   Haliotis discus.
XX
PN   WO200011156-A1.
XX
PD   02-MAR-2000.
XX
PF   01-JUL-1999;   99WO-JP003551.
XX
PR   18-AUG-1998;   98JP-00232153.
XX
PA   (NORQ ) JAPAN MIN AGRIC FORESTRY & FISHERIES.
XX
PI   Takahashi H,  Sekino M;
XX
DR   WPI; 2000-224692/19.
XX
PT   Isolation of satellite sequences from genomic DNA for use as DNA markers
PT   comprises isolating a library with high homogeneity by DNA fragmentation.
XX
PS   Example 5; Page 14; 35pp; Japanese.
XX
CC   The invention provides a novel method for isolation of satellite
CC   sequences from genomic DNA that comprises fragmentation of the DNA by a
CC   method which is not dependent on base sequences, then selection of the
CC   satellite sequences from the obtained genomic library of high
CC   homogeneity. The method is useful for the isolation of microsatellite DNA
CC   sequences which can be used as DNA markers. The new method markedly
CC   improves the efficiency of isolation of satellite sequences in comparison
CC   to prior art methods which are reliant on base sequences. Sequences
CC   AAZ98483-514 represent sequences from Haliotis discus, used in the method
CC   of the invention
XX
SQ   Sequence 20 BP; 11 A; 9 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2318 TGTGTGTGTGTGTGTGCGTG 2337
              |||||||||||||| || |||
Db         20 TGTGTGTGTGTGTTTGTGTG 1


RESULT 786
AAA95391/c
ID   AAA95391 standard; DNA; 20 BP.
XX
AC   AAA95391;
XX
DT   12-FEB-2001  (first entry)
XX
DE   Rat FGFR coding sequence PCR primer #2.
XX
KW   Rat; Nurr1; tyrosine hydroxylase; catecholamine-related disease;
KW   Parkinson's disease; manic depression; schizophrenia; PCR primer; ss.
XX
OS   Rattus norvegicus.
XX
PN   WO200058451-A1.
XX
PD   05-OCT-2000.
XX
PF   21-MAR-2000; 2000WO-US007544.
XX
PR   26-MAR-1999;   99US-00277078.
XX
PA   (SALK ) SALK INST BIOLOGICAL STUDIES.
XX
PI   Sakurada K,  Palmer T,  Gage FH;
```

```
XX
DR   WPI; 2000-656165/63.
XX
PT   Cell comprising exogenous nucleic acid inducing tyrosine hydroxylase
PT   expression useful for treating catecholamine-related diseases such as
PT   Parkinson's disease, manic depression and schizophrenia.
XX
PS   Example 1; Page 20; 68pp; English.
XX
CC   The present invention describes the rat Nurr1 coding and protein
CC   sequences. The Nurr1 protein is involved in the induction of tyrosine
CC   hydroxylase expression in adult rat-derived hippocampal progenitor cells.
CC   The Nurr1 gene and protein can be used in the treatment of catecholamine-
CC   related diseases such as Parkinson's disease, manic depression and
CC   schizophrenia. They can also be used to induce tyrosine hydroxylase
CC   expression and identify tyrosine hydroxylase related deficiencies, which
CC   are linked to the same diseases. The present sequence is a PCR primer
CC   used in a method to differentiate adult neural progenitor cells
XX
SQ   Sequence 20 BP; 5 A; 6 C; 2 G; 5 T; 0 U; 2 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1e+03;
  Matches   17;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1666 ATGAAGATCGCAGACTTCGG 1685
              ||||||||:||:||||| ||
Db         20 ATGAAGATHGCDGACTTTGG 1


RESULT 787
AAF91351/c
ID   AAF91351 standard; DNA; 20 BP.
XX
AC   AAF91351;
XX
DT   04-MAY-2001  (first entry)
XX
DE   Human E2F transcription factor 1 antisense oligonucleotide #57.
XX
KW   Antisense; E2F transcription factor 1; human; infection; inflammation;
KW   tumour; ss.
XX
OS   Homo sapiens.
XX
PN   US6187587-B1.
XX
PD   13-FEB-2001.
XX
PF   02-MAR-2000; 2000US-00517584.
XX
PR   02-MAR-2000; 2000US-00517584.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Popoff I,  Brown-Driver VL,  Cowsert LM;
XX
DR   WPI; 2001-190981/19.
XX
PT   Antisense compound capable of inhibiting the expression of E2F
PT   transcription factor 1, useful for preventing or delaying infection,
PT   inflammation or tumor formation.
XX
PS   Claim 1; Col 43; 40pp; English.
XX
CC   The present invention relates to antisense compounds up to 30 nucleobases
CC   in length targeted to a E2F transcription factor 1 The invention is
CC   useful for inhibiting the expression of E2F transcription factor 1 in
CC   cells or tissues. The antisense oligonucleotides may also be used as a
CC   research agent and to prevent infection, inflammation or tumours
XX
SQ   Sequence 20 BP; 8 A; 9 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2325 GTGTGTGTGCGTGTGTGTGT 2344
              |||||| || ||||||||||
Db         20 GTGTGTGAGCATGTGTGTGT 1


RESULT 788
AAD35726/c
ID   AAD35726 standard; DNA; 20 BP.
XX
AC   AAD35726;
XX
DT   26-JUL-2002  (first entry)
XX
DE   Human hIbeta4BP antisense oligonucleotide, ISIS #129427.
XX
KW   Antisense; human Integrin beta 4 binding protein; hIbeta4BP; cytostatic;
KW   cell proliferation; cancer; gene therapy; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    3
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    5
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    6
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    11
FT                    /*tag=  g
FT                    /mod_base= m5c
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   US6355482-B1.
XX
PD   12-MAR-2002.
XX
PF   17-NOV-2000; 2000US-00716161.
XX
PR   17-NOV-2000; 2000US-00716161.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Freier SM;
XX
DR   WPI; 2002-370579/40.
XX
PT   New antisense compound targeted to a region of a nucleic acid encoding
PT   human Integrin beta 4 binding protein and that inhibits expression of the
PT   nucleic acid, for treating e.g. cancer.
XX
PS   Claim 3; Col 44; 40pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   encoding human Integrin beta 4 binding protein (hIbeta4BP), which
CC   specifically hybridises with the nucleic acid and inhibits its
```

CC expression. The antisense compounds are useful to prevent or treat
CC diseases associated with hIbeta4BP expression, particularly conditions
CC involving aberrant or deregulated cell proliferation (e.g. cancer). The
CC hIbeta4BP polynucleotide is used in gene therapy. The present sequence is
CC an antisense oligonucleotide targetted to hIbeta4BP
XX
SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 718 AACACCACCGACAAGGAGCT 737
|| ||||||||| |||||||
Db 20 AATACCACCGACCAGGAGCT 1

RESULT 789
AAD22911/c
ID AAD22911 standard; DNA; 20 BP.
XX
AC AAD22911;
XX
DT 26-FEB-2002 (first entry)
XX
DE Human soluble LIGHT DNA generating mutagenic forward PCR primer #4.
XX
KW Human; herpes virus entry-mediated; HVEM; p30; immunosuppressive; tumour;
KW inflammatory disorder; herpes virus infection; lymphocyte proliferation;
KW neuroprotective; dermatological; virucide; gene therapy; PCR primer; SLE;
KW systemic lupus erythematosus; autoimmune disease; diabetes mellitus;
KW rheumatoid arthritis; multiple sclerosis; myasthenia gravis; LIGHT; ss.
XX
OS Homo sapiens.
XX
PN WO200179496-A2.
XX
PD 25-OCT-2001.
XX
PF 11-APR-2001; 2001WO-US011857.
XX
PR 12-APR-2000; 2000US-00549096.
XX
PA (LJOL-) LA JOLLA INST ALLERGY & IMMUNOLOGY.
XX
PI Ware CF;
XX
DR WPI; 2002-026029/03.
XX
PT Novel polypeptide useful for inhibiting herpes virus production in cells,
PT comprises isolated or recombinant homotrimeric p30 polypeptides which
PT bind to lymphotoxin receptor and to herpes virus entry-mediated
PT polypeptide (HVEM).
XX
PS Example 12; Page 59; 104pp; English.
XX
CC The invention relates to an isolated or recombinant homotrimeric p30
CC polypeptide comprising a monomer polypeptide with a molecular weight of
CC 30 kDa. p30 is found on the membrane protein and also functions as a
CC cytokine. p30 is also called LIGHT because this is homologous to
CC Lymphotoxins, exhibits Inducible expression, and competes with HSV
CC Glycoprotein D for HVEM, a receptor expressed T lymphocytes.p30 binds to
CC lymphotoxin beta receptor or to herpes virus entry-mediated polypeptide
CC (HVEM). p30 is useful for inhibiting virus production in cells and for
CC modulating a lymphotoxin beta receptor (LTV SR)-mediated cellular
CC response. p30 is useful for treating inflammatory disorders, tumours, for
CC blocking the entry of herpes virus into cells, and to treat or prevent
CC herpes virus infections such as beta herpes virus and cytomegalovirus.
CC p30 is also useful for inhibiting p30-mediated cellular response e.g.,
CC inhibition of a lymphocyte (a pathogenic effector cell) cellular response
CC such as lymphocyte proliferation. The inhibited lymphocyte response
CC modulates a T or B lymphoma or an autoimmune disease such as rheumatoid
CC arthritis, insulin dependent diabetes mellitus, multiple sclerosis,
CC systemic lupus erythematosus (SLE) or myasthenia gravis. Also, the
CC inhibited lymphocyte response modulates a reaction to a transplant. p30
CC DNA is useful in gene therapy. The present sequence is a mutagenic PCR
CC primer used for generating soluble LIGHT DNA also referred as p30
XX
SQ Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2110 AGCTCCAGCTCCTCAGGGGA 2129
|||||||||||||| ||| |
Db 20 AGCTCCAGCTCCTCGGGGAA 1

RESULT 790
ABX80012/c
ID ABX80012 standard; cDNA; 20 BP.
XX
AC ABX80012;
XX
DT 17-APR-2003 (first entry)
XX
DE EST polymorphic DNA repeat polynucleotide #337.
XX
KW EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
KW Haw River syndrome; Huntington's disease; fragile-X syndrome;
KW Fredreich's ataxis; myotonic dystrophy; hyperandrogenaemia;
KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
XX
OS Homo sapiens.
XX
PN US6472154-B1.
XX
PD 29-OCT-2002.
XX
PF 31-DEC-1999; 99US-00475947.
XX
PR 31-DEC-1999; 99US-00475947.
XX
PA (TEXA) UNIV TEXAS SYSTEM.
XX
PI Garner HR, Wren JD, Minna JD, Fondon JW;
XX
DR WPI; 2003-208818/20.
XX
PT Identifying a candidate polymorphic repeat within a coding sequence, for
PT understanding or treating genetic disease, comprises detecting tandem
PT repeats in a target coding sequence and scoring the repeats for
PT polymorphic probability.
XX
PS Example; Col 1165; 588pp; English.
XX
CC The invention discloses a method for identifying a candidate polymorphic
CC repeat within a coding sequence (expressed sequence tag, EST), which
CC comprises detecting tandem repeats in a target coding sequence, scoring
CC the repeats for polymorphic probability and generating a dataset
CC correlating the repeats with polymorphic probability to identify a
CC candidate polymorphic repeat. The computational methods (polymorphic
CC marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are
CC useful for identifying and detecting candidate polymorphic repeats in
CC human genes, which can be used to understand, treat or eliminate genetic
CC diseases, predispositions or adverse drug-treatment reactions. Examples
CC of diseases linked to nucleotide repeats are Machado-Joseph, Haw River
CC syndrome, Huntington's disease, fragile-X syndrome, Fredreich's ataxis,
CC myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and
CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are
CC the polymorphic repeats identified for a search of human ESTs
XX
SQ Sequence 20 BP; 9 A; 11 C; 0 G; 0 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2313 TGGTCTGTGTGTGTGTGTGT 2332
              |||  ||||||||||||||||
Db         20 TGGGGTGTGTGTGTGTGTGT 1


RESULT 791
ABZ81533/c
ID   ABZ81533 standard; DNA; 20 BP.
XX
AC   ABZ81533;
XX
DT   26-AUG-2003  (first entry)
XX
DE   PKA regulatory subunit RII beta antisense oligonucleotide ISIS #114458.
XX
KW   Human; cytostatic; antidiabetic; antisense therapy; phosphorothioate;
KW   protein kinase inhibitor; protein kinase A; PKA;
KW   regulatory subunit RII beta; cAMP-dependent protein kinase; diabetes;
KW   cancer; infection; inflammation; tumour; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Oligonucleotide has phosphorothioate backbone and
FT                    all cytidine nucleotides are 5-methylcytidine. Optionally
FT                    some nucleotides with 2'-methoxyethyl (2'-MOE wings)
FT                    modification"
XX
PN   WO2003010283-A2.
XX
PD   06-FEB-2003.
XX
PF   15-JUL-2002; 2002WO-US022629.
XX
PR   25-JUL-2001; 2001US-00915485.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Wyatt JR;
XX
DR   WPI; 2003-239434/23.
XX
PT   New antisense oligonucleotides targeted to nucleic acid encoding protein
PT   kinase A regulatory subunit RII beta, useful in treating diseases e.g.
PT   cancer associated with the aberrant expression of the protein kinase.
XX
PS   Claim 3; Page 74; 98pp; English.
XX
CC   The present invention relates to novel antisense oligonucleotides
CC   (ABZ81522-ABZ81593) which are targeted to human protein kinase A (PKA)
CC   regulatory subunit RII beta nucleotide sequence (ABZ81513), and which
CC   specifically hybridise with and inhibit the expression of the PKA
CC   regulatory subunit RII beta (PKA is also known as cAMP-dependent protein
CC   kinase). The antisense oligonucleotides are useful for modulating the
CC   expression of PKA regulatory subunit RII beta and for treating diseases
CC   or conditions associated with aberrant expression of PKA regulatory
CC   subunit RII beta, e.g. diabetes or cancer. The antisense compounds are
CC   also useful for diagnostics, therapeutics, prophylaxis, e.g. to prevent
CC   or delay infection, inflammation or tumour formation, as research
CC   reagents and kits, and in distinguishing between functions of various
CC   members of a biological pathway
XX
SQ   Sequence 20 BP; 0 A; 13 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        177 CGAAGACGGGGAGGACGAGG 196
              ||| ||||||||||| ||||
Db         20 CGAGGACGGGGAGGAGGAGG 1


RESULT 792
ABZ89549
ID   ABZ89549 standard; DNA; 20 BP.
XX
AC   ABZ89549;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 4791; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 1 A; 2 C; 8 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
```

```
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2325 GTGTGTGTGCGTGTGTGTGT 2344
              || ||||||| |||||||||
Db          1 GTATGTGTGCCTGTGTGTGT 20


RESULT 793
ABZ84884
ID   ABZ84884 standard; DNA; 20 BP.
XX
AC   ABZ84884;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Claim 15; SEQ ID NO 126; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 0 A; 7 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
```

```
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3644 GCTGTCCCTTGCTTGCCTGC 3663
              ||||||||||  ||||||||
Db          1 GCTGTCCCTTTTTTGCCTGC 20


RESULT 794
ABZ88076
ID   ABZ88076 standard; DNA; 20 BP.
XX
AC   ABZ88076;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 3318; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
```

```
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1876 GAGGAGCTCTTCAAGCTGCT 1895
              |||||||||  |||||||||
Db          1 GAGGAGCTCAACAAGCTGCT 20


RESULT 795
ABZ98946/c
ID   ABZ98946 standard; DNA; 20 BP.
XX
AC   ABZ98946;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human PDE4A oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 14188; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1886 TCAAGCTGCTGAAGGAGGGC 1905
              |||||||||| |||||| |
Db         20 TCAAGCTGCTGCAGGAGGAC 1


RESULT 796
AAD55047/c
ID   AAD55047 standard; DNA; 20 BP.
XX
AC   AAD55047;
XX
DT   26-JUN-2003  (first entry)
XX
DE   Alstroemeria gad3 gene amplifying primer, NW23.
XX
KW   Alpha-methylene-gamma-butyrolactone; glutamate decarboxylase; herbicide;
KW   enzyme; gamma-aminobutyrate aminotransferase; UDP-glucosyltransferase;
KW   gamma-hydroxybutyrate dehydrogenase; tulipalin A; plant; primer; PCR; ss.
XX
OS   Alstroemeria.
XX
PN   WO2002101013-A2.
XX
PD   19-DEC-2002.
XX
PF   10-JUN-2002; 2002WO-US018230.
XX
PR   08-JUN-2001; 2001US-0297198P.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
PA   (PRAB/) PRABHU V.
XX
PI   Damude HG,  Flint D,  Prabhu V,  Wang H;
XX
DR   WPI; 2003-201331/19.
XX
PT   Novel isolated nucleic acid fragment encoding a tuliposide A synthesizing
PT   protein, useful for creating recombinant organisms that have the ability
PT   to synthesize tulipalin A, tuliposide A or tuliposide A pathway
PT   intermediates.
XX
PS   Example 3; Page 135; 71pp; English.
XX
CC   The invention relates to genes encoding key enzymes in the biosynthesis
CC   of alpha-methylene-gamma-butyrolactone (tulipalin A). Key enzymes include
CC   glutamate decarboxylase, gamma-aminobutyrate aminotransferase, gamma-
CC   hydroxybutyrate dehydrogenase and UDP-glucosyltransferase. The invention
CC   is useful for producing tulipalin A or tuliposide A or its pathway
CC   intermediates such as alpha-methylenesuccinate semialdehyde, alpha-
CC   methylene-gamma-aminobutyrate or alpha-methylene-gamma-hydroxybutyrate.
CC   Tulipalin A sequences are used to immunise animals to produce polyclonal
CC   or monoclonal antibodies with specificity for them or as targets to
CC   facilitate design and/or identification of inhibitors of those enzymes
CC   that may be useful as herbicides. The present sequence is a primer used
CC   to amplify Alstroemeria glutamate decarboxylase homologue gene (gad3)
XX
SQ   Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        883 GGCAGTGTGTATGCAGGCAT 902
              |||| ||||||||||| ||
Db         20 GGCATTGTGTATGCAGGAAT 1


RESULT 797
ABD24306
ID   ABD24306 standard; DNA; 20 BP.
```

XX
AC ABD24306;
XX
DT 29-JUL-2004 (first entry)
XX
DE AI095013-derived oligonucleotide DNA SEQ ID 3318.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 3318; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1876 GAGGAGCTCTTCAAGCTGCT 1895
||||||||| |||||||||
Db 1 GAGGAGCTCAACAAGCTGCT 20

RESULT 798
ABD31977/c
ID ABD31977 standard; DNA; 20 BP.
XX
AC ABD31977;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human PDE4A-derived oligonucleotide SEQ ID 14188.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 14188; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,

```
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1886 TCAAGCTGCTGAAGGAGGGC 1905
              |||||||||| |||||| |
Db         20 TCAAGCTGCTGCAGGAGGAC 1


RESULT 799
ABD21114
ID   ABD21114 standard; DNA; 20 BP.
XX
AC   ABD21114;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human transglutaminase-derived oligo SEQ ID 126.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 126; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 0 A; 7 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3644 GCTGTCCCTTGCTTGCCTGC 3663
              |||||||||| ||||||||
Db          1 GCTGTCCCTTTTTTGCCTGC 20


RESULT 800
ABD25779
ID   ABD25779 standard; DNA; 20 BP.
XX
AC   ABD25779;
XX
DT   29-JUL-2004  (first entry)
XX
DE   AI085559-derived oligonucleotide SEQ ID 4791.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
```

```
XX
PS   Claim 15; SEQ ID NO 4791; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 1 A; 2 C; 8 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2325 GTGTGTGTGCGTGTGTGTGT 2344
              || ||||||| |||||||||
Db          1 GTATGTGTGCCTGTGTGTGT 20


RESULT 801
ADH70402
ID   ADH70402 standard; DNA; 20 BP.
XX
AC   ADH70402;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human Vbeta gene repeat sequence #192.
XX
KW   human; T-cell associated disease; Vbeta; autoimmune disease;
KW   degenerative nervous system disease; graft versus host disease;
KW   hypersensitivity disease; infectious disease; neoplastic disease;
KW   Addison's disease; atrophic gastritis;
KW   degenerative nervous system disease; multiple sclerosis;
KW   Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW   allergy; type II hypersensitivity; Goodpasture's syndrome;
KW   type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW   HIV; fungal infection; Candida; parasitic infection; schistosome;
KW   filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW   lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW   breast cancer; ds.
XX
OS   Homo sapiens.
XX
PN   US2002150891-A1.
XX
PD   17-OCT-2002.
XX
PF   05-MAR-1999;   99US-00263959.
XX
PR   19-SEP-1994;   94US-00309335.
PR   19-SEP-1995;   95US-00531241.
XX
PA   (HOOD/) HOOD L E.
PA   (ROWE/) ROWEN L.
XX
PI   Hood LE,  Rowen L;
XX
DR   WPI; 2004-059052/06.
XX
PT   Kit for diagnozing and treating T-cell associated diseases e.g.
PT   autoimmune, degenerative nervous system and infectious disease, comprises
PT   nucleic acid primers specifically priming and allowing amplification of a
PT   Vbeta gene.
XX
PS   Disclosure; SEQ ID NO 596; 164pp; English.
XX
CC   The invention relates to a kit for diagnosing and treating T-cell
CC   associated diseases which comprises a panel of nucleic acid primers
CC   specifically priming and allowing amplification of each Vbeta gene,
CC   VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC   rejection and diagnosing and treating T-cell associated diseases
CC   including autoimmune diseases, degenerative nervous system diseases,
CC   graft versus host disease, hypersensitivity diseases, infectious diseases
CC   and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC   atrophic gastritis. Degenerative nervous system diseases include multiple
CC   sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC   I hypersensitivities such as contact with allergens that lead to
CC   allergies, Type II hypersensitivities such as those present in
CC   Goodpasture's syndrome and Type IV hypersensitivities such as those
CC   manifested in leprosy. Infectious diseases include viral infections
CC   caused by viruses such as HIV, fungal infections such as those caused by
CC   the yeast genus Candida, parasitic infections such as those caused by
CC   schistosomes, filaria and bacterial infections such as those caused by
CC   Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC   such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC   breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ   Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3463 TATATATATCTATATATATA 3482
              ||||||||| ||| ||||||
Db          1 TATATATATTTATTTATATA 20


RESULT 802
ADH70402/c
ID   ADH70402 standard; DNA; 20 BP.
XX
AC   ADH70402;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human Vbeta gene repeat sequence #192.
XX
KW   human; T-cell associated disease; Vbeta; autoimmune disease;
KW   degenerative nervous system disease; graft versus host disease;
KW   hypersensitivity disease; infectious disease; neoplastic disease;
KW   Addison's disease; atrophic gastritis;
KW   degenerative nervous system disease; multiple sclerosis;
KW   Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW   allergy; type II hypersensitivity; Goodpasture's syndrome;
KW   type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW   HIV; fungal infection; Candida; parasitic infection; schistosome;
KW   filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW   lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
```

```
KW   breast cancer; ds.
XX
OS   Homo sapiens.
XX
PN   US2002150891-A1.
XX
PD   17-OCT-2002.
XX
PF   05-MAR-1999;   99US-00263959.
XX
PR   19-SEP-1994;   94US-00309335.
PR   19-SEP-1995;   95US-00531241.
XX
PA   (HOOD/) HOOD L E.
PA   (ROWE/) ROWEN L.
XX
PI   Hood LE,  Rowen L;
XX
DR   WPI; 2004-059052/06.
XX
PT   Kit for diagnozing and treating T-cell associated diseases e.g.
PT   autoimmune, degenerative nervous system and infectious disease, comprises
PT   nucleic acid primers specifically priming and allowing amplification of a
PT   Vbeta gene.
XX
PS   Disclosure; SEQ ID NO 596; 164pp; English.
XX
CC   The invention relates to a kit for diagnosing and treating T-cell
CC   associated diseases which comprises a panel of nucleic acid primers
CC   specifically priming and allowing amplification of each Vbeta gene,
CC   VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC   rejection and diagnosing and treating T-cell associated diseases
CC   including autoimmune diseases, degenerative nervous system diseases,
CC   graft versus host disease, hypersensitivity diseases, infectious diseases
CC   and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC   atrophic gastritis. Degenerative nervous system diseases include multiple
CC   sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC   I hypersensitivities such as contact with allergens that lead to
CC   allergies, Type II hypersensitivities such as those present in
CC   Goodpasture's syndrome and Type IV hypersensitivities such as those
CC   manifested in leprosy. Infectious diseases include viral infections
CC   caused by viruses such as HIV, fungal infections such as those caused by
CC   the yeast genus Candida, parasitic infections such as those caused by
CC   schistosomes, filaria and bacterial infections such as those caused by
CC   Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC   such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC   breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ   Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

  Query Match          0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2825 TATATACATATATATATATA 2844
              |||||| ||| |||||||||
Db         20 TATATAAATAAATATATATA 1


RESULT 803
ADH68620/c
ID   ADH68620 standard; DNA; 20 BP.
XX
AC   ADH68620;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Rosa sp forward PCR primer for microsatellite marker RMS129.
XX
KW   microsatellite marker; rose genome; PCR; hypervariable region;
KW   genetic mapping; relatedness analysis; hybrid identification; plant;
KW   breeding; primer; ss.
XX
OS   Rosa sp.
XX
PN   WO2003097869-A2.
XX
PD   27-NOV-2003.
XX
PF   16-MAY-2003; 2003WO-DE001572.
XX
PR   17-MAY-2002; 2002DE-01022632.
XX
PA   (CONC-) CON CIPIO GMBH.
XX
PI   Suess K;
XX
DR   WPI; 2004-012541/01.
XX
PT   New oligonucleotides from rose microsatellite markers, useful for genomic
PT   analysis, including identification of varieties and hybrids.
XX
PS   Claim 1; Page 11; 52pp; German.
XX
CC   This invention describes novel oligonucleotides derived from
CC   microsatellite markers and used for the amplification of the rose genome.
CC   The invention also describes a test kit for genetic analysis of cultured
CC   or wild forms of the genus Rosa sp. that contains at least one of the new
CC   oligonucleotide primers and preparing microsatellite markers of Rosa sp.
CC   by PCR amplification of hypervariable genomic regions, using at least one
CC   primer pair, to produce polymorphic fragments which are separated and
CC   detected. The primer pairs flank the microsatellite locus being
CC   amplified. The amplified markers are separated by electrophoresis,
CC   especially on high-resolution agarose or native or denatured
CC   polyacrylamide gels, or by mass spectrometry. After separation, the
CC   amplicons are detected by staining (ethidium bromide or silver),
CC   radioactive labelling and autoradiography, automated sequencing using
CC   primers labelled with dyes or fluorophores or by mass spectrometry. A
CC   genomic library of 0.5-1.5 kb fragments from the rose variety
CC   'Lichtblick' was constructed in pUC18 and used to transform Escherichia
CC   coli and the cells tested against a high-density array of synthetic
CC   microsatellites. Inserts in plasmids that hybridised were sequenced and
CC   the identified sequences selected for ability to differentiate between a
CC   set of 30 rose varieties. The oligonucleotides are used for genetic
CC   analysis of cultivated and wild types of roses, particularly for genetic
CC   mapping and labelling of mono- or poly-genic traits, selection, analysis
CC   of relatedness, identification of varieties and evaluation of varietal
CC   purity, identification of hybrids and plant breeding. The
CC   oligonucleotides are useful in automated processes, do not require
CC   radioactive detection methods and can differentiate between almost all
CC   commercial rose varieties. ADH68375-ADH68674 represent the PCR primers
CC   used to amplify the Rose microsatellite regions described in the method
CC   of the invention.
XX
SQ   Sequence 20 BP; 7 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match          0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2337 GTGTGTGTGTGTGTGCACAT 2356
              ||||||| |||||||||| |
Db         20 GTGTGTGAGTGTGTGCACGT 1


RESULT 804
ADJ60829/c
ID   ADJ60829 standard; DNA; 20 BP.
XX
AC   ADJ60829;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Oligonucleotide associated to PDE4A #112.
XX
KW   interleukin; IL-4 receptor; IL-5 receptor; lung disease;
```

```
KW   airway inflammation; allergy; asthma; impeded respiration;
KW   cystic fibrosis; acute respiratory distress syndrome;
KW   pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011613-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023509.
XX
PR   29-JUL-2002; 2002US-0399076P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Tang L,  Sandrasagra A,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-203534/19.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codons and introns of respiratory disease-relevant genes e.g.,
PT   CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT   disease e.g., asthma.
XX
PS   Claim 2; SEQ ID NO 1685; 85pp; English.
XX
CC   The present invention relates to an oligonucleotide anti-sense to e.g.,
CC   initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC   end of nucleic acid target comprising gene(s) chosen from e.g.
CC   interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC   oligonucleotide and optionally surfactant operatively linked to the
CC   oligonucleotide. The method is useful for preventing or treating a
CC   respiratory or lung disease, which involves administering to the airways
CC   of a subject an effective amount of an inhibitor. The oligonucleotide is
CC   useful for production of a medicament for the prevention and/or treatment
CC   of a respiratory or lung disease. The respiratory or lung disease is
CC   chosen from airway inflammation, allergy(ies), asthma, impeded
CC   respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC   (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC   (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC   obstruction. The present sequence represents an oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1886 TCAAGCTGCTGAAGGAGGGC 1905
              |||||||||| |||||| |
Db         20 TCAAGCTGCTGCAGGAGGAC 1


RESULT 805
ADM15201/c
ID   ADM15201 standard; DNA; 20 BP.
XX
AC   ADM15201;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1388.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 1388; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 8 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2323 GTGTGTGTGTGCGTGTGTGT 2342
              ||||||||| |||||||||
Db         20 GTGTGTGTGCCCGTGTGTGT 1
```

```
RESULT 806
ADM15209/c
ID   ADM15209 standard; DNA; 20 BP.
XX
AC   ADM15209;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1396.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 1396; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 8 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2322 TGTGTGTGTGTGCGTGTGTG 2341
              ||||||||||  ||||||||
Db         20 TGTGTGTGTGCCCGTGTGTG 1


RESULT 807
ADM14960/c
ID   ADM14960 standard; DNA; 20 BP.
XX
AC   ADM14960;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1147.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
```

PS Claim 4; SEQ ID NO 1147; 132pp; English.
XX
CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective,. nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 8 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2324 TGTGTGTGTGCGTGTGTGTG 2343
|||||||| ||||||||||
Db 20 TGTGTGTGCCCGTGTGTGTG 1

RESULT 808
ADM14971/c
ID ADM14971 standard; DNA; 20 BP.
XX
AC ADM14971;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1158.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methocyethyls"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Gierse JK;
XX
DR WPI; 2004-305094/28.
XX
PT New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
PS Claim 4; SEQ ID NO 1158; 132pp; English.
XX
CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 8 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2325 GTGTGTGTGCGTGTGTGTGT 2344
||||||| ||||||||||
Db 20 GTGTGTGCCCGTGTGTGTGT 1

RESULT 809
ADO46318/c
ID ADO46318 standard; DNA; 20 BP.
XX
AC ADO46318;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #1684.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.

```
XX
PF   25-JUL-2003; 2003US-00627930.
XX
PR   23-APR-2002; 2002WO-US013135.
PR   23-APR-2002; 2002WO-US013143.
XX
PA   (NYCE/) NYCE J W.
PA   (SAND/) SANDRASAGRA A.
PA   (TANG/) TANG L.
PA   (AGUI/) AGUILAR D.
PA   (MILL/) MILLER S.
PA   (SHAH/) SHAHABUDDIN S.
PA   (LUHH/) LU H.
PA   (CONG/) CONG H.
XX
PI   Nyce JW,  Sandrasagra A,  Tang L,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-293804/27.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT   RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT   asthma.
XX
PS   Claim 2; SEQ ID NO 1685; 174pp; English.
XX
CC   The invention relates to oligonucleotides anti-sense to an initiation
CC   codon, coding region, 5' or 3' intron-exon junction, intron or region
CC   with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC   chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC   -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC   tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC   also relates to a method of screening a candidate compound that binds to
CC   one or more nucleic acid target(s) or expressed product(s), for the
CC   prevention and/or treatment of a respiratory or lung disease. The
CC   oligonucleotides are useful for reducing or inhibiting expression of a
CC   gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC   CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC   tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC   useful for preventing or treating a respiratory or lung disease. The
CC   respiratory or lung disease is associated with hyper-responsiveness to
CC   and/or increased levels of, adenosine and/or levels of adenosine A
CC   receptor(s), and/or asthma and/or lung allergies associated with
CC   inflammation or an inflammatory disease. The respiratory or lung disease
CC   is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC   cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC   allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC   hypertension, lung inflammation, bronchitis, airway obstruction or
CC   bronchoconstriction. This sequence represents an oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1886 TCAAGCTGCTGAAGGAGGGC 1905
              |||||||||||  ||||||  |
Db         20 TCAAGCTGCTGCAGGAGGAC 1


RESULT 810
ADP44427
ID   ADP44427 standard; DNA; 20 BP.
XX
AC   ADP44427;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Human ABCC5 DNA antisense oligonucleotide #43.
XX
KW   Human; ABCC5; ss; antisense oligonucleotide; phosphorothioate linkage;
KW   2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004115649-A1.
XX
PD   17-JUN-2004.
XX
PF   12-DEC-2002; 2002US-00319893.
XX
PR   12-DEC-2002; 2002US-00319893.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-449386/42.
XX
PT   New oligonucleotide compound that inhibits expression of ABCC5, useful
PT   for preparing a composition for treating hyperproliferative disorder,
PT   e.g., cancer.
XX
PS   Example 15; SEQ ID NO 53; 57pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding the human ABCC5 polypeptide. The compound is an antisense
CC   oligonucleotide that specifically hybridises with the nucleic acid and
CC   inhibits expression of the polypeptide. The antisense oligonucleotide
CC   comprises at least one modified internucleoside linkage i.e. a
CC   phosphorothioate linkage, at least one modified sugar moiety, preferably
CC   a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC   comprising a 5-methylcytosine. The antisense compounds are useful for
CC   modulating the expression of the human ABCC5 polypeptide and in
CC   preparation of a composition for treating hyperproliferative disorders,
CC   e.g. cancer. This sequence represents an antisense oligonucleotide
CC   targeted to DNA encoding the human ABCC5 polypeptide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 9 C; 1 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2691 TTTCCCACTTCCCACCCTGC 2710
              |||  ||||||||||| ||||
Db          1 TTTTCCACTTCCCACACTGC 20


RESULT 811
ADP44502/c
ID   ADP44502 standard; DNA; 20 BP.
XX
AC   ADP44502;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Human ABCC5 DNA antisense oligonucleotide target region #40.
XX
KW   Human; ABCC5; ss; antisense oligonucleotide; phosphorothioate linkage;
KW   2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004115649-A1.
XX
PD   17-JUN-2004.
XX
PF   12-DEC-2002; 2002US-00319893.
XX
PR   12-DEC-2002; 2002US-00319893.
```

```
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-449386/42.
XX
PT   New oligonucleotide compound that inhibits expression of ABCC5, useful
PT   for preparing a composition for treating hyperproliferative disorder,
PT   e.g., cancer.
XX
PS   Example 15; SEQ ID NO 128; 57pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding the human ABCC5 polypeptide. The compound is an antisense
CC   oligonucleotide that specifically hybridises with the nucleic acid and
CC   inhibits expression of the polypeptide. The antisense oligonucleotide
CC   comprises at least one modified internucleoside linkage i.e. a
CC   phosphorothioate linkage, at least one modified sugar moiety, preferably
CC   a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC   comprising a 5-methylcytosine. The antisense compounds are useful for
CC   modulating the expression of the human ABCC5 polypeptide and in
CC   preparation of a composition for treating hyperproliferative disorders,
CC   e.g. cancer. This sequence represents a human ABCC5 DNA antisense
CC   oligonucleotide target region of the invention.
XX
SQ   Sequence 20 BP; 7 A; 1 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2691 TTTCCCACTTCCCACCCTGC 2710
              ||| |||||||||||| ||||
Db         20 TTTTCCACTTCCCACACTGC 1


RESULT 812
ABS98543
ID   ABS98543 standard; DNA; 21 BP.
XX
AC   ABS98543;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human acetyl choline muscarinic receptor 3 polymorphic sequence #9.
XX
KW   Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW   cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW   adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW   aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW   cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW   epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW   glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW   HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW   NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW   UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW   UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW   multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW   multidrug resistance associated protein 3; cancer; prostate;
KW   acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW   altered drug metabolism; cardiovascular function; colorectal tumour;
KW   central nervous system; pulmonary; immunological; SNP;
KW   single nucleotide polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO200257410-A2.
XX
PD   25-JUL-2002.
XX
PF   28-NOV-2001; 2001WO-US044838.
XX
PR   28-NOV-2000; 2000US-00724389.
XX
PA   (DNAS-) DNA SCI LAB INC.
XX
PI   Guida M,  Hall J;
XX
DR   WPI; 2002-698522/75.
XX
PT   Isolated nucleic acid molecules having polymorphisms in known human genes
PT   e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT   for locating, identifying and characterizing the genes responsible for
PT   disorder-related traits.
XX
PS   Example 28; Page 159; 714pp; English.
XX
CC   This invention relates to the sequence of an isolated nucleic acid
CC   molecule comprising at least one base variation from that of a known
CC   human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC   cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC   aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC   (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC   inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC   protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC   transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC   transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC   sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC   (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC   transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC   (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC   (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC   receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC   The polymorphisms in the human genes cited in the invention are useful as
CC   genetic linkage markers for locating and characterising the genes that
CC   are responsible for specific traits within the genome and eventually
CC   identifying the genes responsible for a variety of disorder-related
CC   traits as a result of their e.g., overexpression, constitutive
CC   expression, mutation or underexpression, which may be used in diagnosing
CC   and/or treating the disorders. The nucleic acid molecules comprising the
CC   polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,
CC   ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC   MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC   metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC   AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC   susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC   used to screen for altered cardiovascular function, in COX2 for altered
CC   susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC   nervous system function, in FLAP and HNMT for altered pulmonary,
CC   immunological or haematological function, in KLK2 for altered serine
CC   protease activity in the prostate, in LTF for altered immunological or
CC   haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC   peripheral nervous system function. The present sequence represents a
CC   polymorphic DNA sequence of the invention
XX
SQ   Sequence 21 BP; 9 A; 0 C; 2 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3463 TATATATATCTATATATATA 3482
              ||||||| | ||||||||||
Db          2 TATATATGTGTATATATATA 21


RESULT 813
AAQ20038/c
ID   AAQ20038 standard; DNA; 21 BP.
XX
AC   AAQ20038;
XX
DT   01-APR-1992  (first entry)
XX
DE   Cross-linking oligomer 220 for targetting human TNF.
```

```
XX
KW   deoxyribonucleic acid; major groove; ethanoamino group;
KW   aziridinylcytosine; cross-linking group; tumour necrosis factor; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "N4N4-ethanocytosine"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   3
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   9
FT                   /*tag=  f
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   11
FT                   /*tag=  g
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   13
FT                   /*tag=  h
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   15
FT                   /*tag=  i
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   17
FT                   /*tag=  j
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT   modified_base   21
FT                   /*tag=  k
FT                   /mod_base= OTHER
FT                   /note= "N-methyl-8-oxo-2'-deoxyadenine"
XX
PN   WO9118997-A.
XX
PD   12-DEC-1991.
XX
PF   25-MAY-1990;   90US-00529346.
XX
PR   25-MAY-1990;   90US-00529346.
PR   14-JAN-1991;   91US-00640654.
XX
PA   (GILE-) GILEAD SCIE INC.
XX
PI   Matteucci MD,  Krawczyk S;
XX
DR   WPI; 1992-007480/01.
XX
PT   New sequence-specific non-photo-activated crosslinking agents - bind to
PT   the major groove of duplex DNA and are esp. useful for treating latent
PT   infections e.g. HIV.
XX
PS   Example 4; Page 25; 42pp; English.
XX
CC   The sequence is designed to target the Human tumour necrosis factor
CC   beginning at nucleotide 1137 and to covalently cross-link to it via the
CC   N4N4-ethanocytosine group. See also AAQ20031-Q20037
XX
SQ   Sequence 21 BP; 10 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3467 TATATCTATATATATAATTT 3486
                || || ||||||||||||||||
Db         21 TAAATATATATATATAATTT 2


RESULT 814
AAQ30386/c
ID   AAQ30386 standard; DNA; 21 BP.
XX
AC   AAQ30386;
XX
DT   25-MAR-2003  (revised)
DT   07-DEC-1992  (first entry)
XX
DE   Oligomer TNF217 for forming triplex with HUMTNFAA target duplex.
XX
KW   Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
KW   malignancy; hepatitis; inflammation; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   3
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   9
FT                   /*tag=  f
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   11
FT                   /*tag=  g
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   13
FT                   /*tag=  h
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   15
FT                   /*tag=  i
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   17
FT                   /*tag=  j
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base   21
```

```
FT                   /*tag=  k
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX
PN   WO9209705-A1.
XX
PD   11-JUN-1992.
XX
PF   25-NOV-1991;    91WO-US008811.
XX
PR   23-NOV-1990;    90US-00617907.
PR   18-JAN-1991;    91US-00643382.
PR   08-APR-1991;    91US-00683420.
PR   17-APR-1991;    91US-00686544.
PR   17-APR-1991;    91US-00686546.
PR   17-APR-1991;    91US-00686547.
PR   27-SEP-1991;    91US-00766733.
XX
PA   (GILE-) GILEAD SCI INC.
XX
PI   Froehler B,  Krawczyk S,  Matteucci MD,  Milligan J;
XX
DR   WPI; 1992-217083/26.
XX
PT   New oligomers contg. modified bases - which form a triplex with G-C
PT   doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT   herpes malignancy and inflammation.
XX
PS   Claim 12; Page 70; 77pp; English.
XX
CC   The synthetic oligomer is capable of forming a triplex at physiological
CC   pH with a purine rich target sequence by coupling into the major groove
CC   of the duplex. The specific target sequence of this oligomer is the human
CC   tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
CC   sequence concd. on one strand of the duplex. The oligomer, and others
CC   like it are useful in diagnosis and therapy of diseases characterised by
CC   specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes,
CC   malignant tumours and inflammation. The triple helices form under mild
CC   conditions thus assays may be carried out without subjecting the test
CC   specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 11 A; 0 C; 0 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3467 TATATCTATATATATAATTT 3486
                || ||  ||||||||||||||
Db         21 TAAATATATATATATAATTT 2


RESULT 815
AAQ30389/c
ID   AAQ30389 standard; DNA; 21 BP.
XX
AC   AAQ30389;
XX
DT   25-MAR-2003  (revised)
DT   07-DEC-1992  (first entry)
XX
DE   Oligomer TNF220 for forming triplex with HUMTNFAA target duplex.
XX
KW   Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
KW   malignancy; hepatitis; inflammation; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N4 N4 ethanocytosine"
FT   modified_base    2
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    3
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    4
FT                   /*tag=  d
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    7
FT                   /*tag=  e
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    9
FT                   /*tag=  f
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    11
FT                   /*tag=  g
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    13
FT                   /*tag=  h
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    15
FT                   /*tag=  i
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    17
FT                   /*tag=  j
FT                   /mod_base= OTHER
FT                   /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT   modified_base    21
FT                   /*tag=  k
FT                   /mod_base= OTHER
FT                   /note= "OTHER=  N6 methyl-8-oxo-2' deoxyadenine"
XX
PN   WO9209705-A1.
XX
PD   11-JUN-1992.
XX
PF   25-NOV-1991;    91WO-US008811.
XX
PR   23-NOV-1990;    90US-00617907.
PR   18-JAN-1991;    91US-00643382.
PR   08-APR-1991;    91US-00683420.
PR   17-APR-1991;    91US-00686544.
PR   17-APR-1991;    91US-00686546.
PR   17-APR-1991;    91US-00686547.
PR   27-SEP-1991;    91US-00766733.
XX
PA   (GILE-) GILEAD SCI INC.
XX
PI   Froehler B,  Krawczyk S,  Matteucci MD,  Milligan J;
XX
DR   WPI; 1992-217083/26.
XX
PT   New oligomers contg. modified bases - which form a triplex with G-C
PT   doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT   herpes malignancy and inflammation.
XX
PS   Claim 12; Page 70; 77pp; English.
XX
CC   The synthetic oligomer is capable of forming a triplex at physiological
CC   pH with a purine rich target sequence by coupling into the major groove
CC   of the duplex. The specific target sequence of this oligomer is the human
CC   tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
CC   sequence concd. on one strand of the duplex. The oligomer, and others
```

```
CC   like it are useful in diagnosis and therapy of diseases characterised by
CC   specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes,
CC   malignant tumours and inflammation. The triple helices form under mild
CC   conditions thus assays may be carried out without subjecting the test
CC   specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 10 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3467 TATATCTATATATATAATTT 3486
              || || ||||||||||||||
Db         21 TAAATATATATATATAATTT 2


RESULT 816
AAQ33326
ID   AAQ33326 standard; DNA; 21 BP.
XX
AC   AAQ33326;
XX
DT   25-MAR-2003  (revised)
DT   19-MAY-1993  (first entry)
XX
DE   KHCV cDNA 3'-end region cloning PCR primer DA17PSHCV.
XX
KW   Korean hepatitis C virus; polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   EP521318-A2.
XX
PD   07-JAN-1993.
XX
PF   10-JUN-1992;   92EP-00109753.
XX
PR   10-JUN-1991;   91KR-00009510.
PR   06-AUG-1991;   91KR-00013601.
XX
PA   (LUCK-) LUCKY LTD.
XX
PI   Cho JM,  Lee YB,  Park YW,  Lim KJ,  Choi DY,  So HS,  Kim CH;
PI   Kim ST,  Yang JY;
XX
DR   WPI; 1993-001883/01.
XX
PT   DNA and polypeptide(s) from a new type of hepatitis C virus (KHCV) - for
PT   diagnosing and vaccinating against KHCV infections.
XX
PS   Example; Page 20; 119pp; English.
XX
CC   The sequence is that of PCR primer DA17PSHCV used in the cloning of the
CC   3'-end region of the Korean hepatitis C virus genome. The DNA sequence
CC   obtd. was KHCV 266 contg. two terminator codons but no poly(A) tail.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 4 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2006 TGGTGGAGGACCTGGACCGT 2025
              |||||| ||| |||||||||
Db          1 TGGTGGTGGAACTGGACCGT 20


RESULT 817
AAQ71073/c
ID   AAQ71073 standard; DNA; 21 BP.
XX
AC   AAQ71073;
XX
DT   25-MAR-2003  (revised)
DT   19-APR-1995  (first entry)
XX
DE   Primer #1 for preparation of merlin cDNA, bases 824-2100.
XX
KW   Polymerase chain reaction; PCR; amplify; primer; bi-lateral schwannoma;
KW   sequence-tagged site assay; chromosome 22; NF2; deletion; hearing loss;
KW   neurofibromatosis; merlin; moesin-erzin-radixin-like protein; D22S28;
KW   tumour suppressor; activity; meningioma; cytoskeleton; gene therapy;
KW   merlin-associated tumour; D22S1; posterior capsular lens opacity;
KW   deafness; balance disorder; paralysis; ss.
XX
OS   Synthetic.
XX
PN   EP613945-A2.
XX
PD   07-SEP-1994.
XX
PF   25-FEB-1994;   94EP-00301367.
XX
PR   25-FEB-1993;   93US-00022034.
PR   04-MAR-1993;   93US-00026063.
PR   19-AUG-1993;   93US-00108808.
PR   22-DEC-1993;   93US-00171718.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Trofatter JA,  Maccollin MM,  Gusella JF;
XX
DR   WPI; 1994-272992/34.
XX
PT   The tumour suppressor gene merlin - for treatment and diagnosis of
PT   tumours and neurofibromatosis (NF2).
XX
PS   Disclosure; Page 14; 86pp; English.
XX
CC   The sequences given in AAQ71073-76 are primers which were used to amplify
CC   regions of the merlin gene. NF2 is a neurofibromatosis which is
CC   characterised by bi-lateral schwannomas. The NF2 "gene" has been shown by
CC   linkage studies to be assigned to chromosome 22. The missing or mutated
CC   gene in NF2 patients has been shown to be the merlin gene. The gene
CC   encodes a protein, merlin (moesin-erzin-radixin-like protein), which
CC   possesses tumour suppressor activity, and whose tumour suppressor
CC   activity is mediated by interactions with the cytoskeleton. The merlin
CC   gene is found on chromosome 22 between the known markers D22S1 and
CC   D22S28. The merlin gene may be used in gene therapy for the treatment of
CC   a merlin-associated tumour or NF2, or for prevention of schwannoma,
CC   meningioma, posterior capsular lens opacities, deafness or hearing loss,
CC   balance disorders or paralysis. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 21 BP; 4 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1614 CATCCACAGGGACCTGGCTG 1633
              |||||| ||||| |||||||
Db         21 CATCCATAGGGAGCTGGCTG 2


RESULT 818
AAQ61901
ID   AAQ61901 standard; DNA; 21 BP.
XX
AC   AAQ61901;
XX
DT   25-MAR-2003  (revised)
DT   04-NOV-1994  (first entry)
```

```
XX
DE   HSV replication inhibiting oligomer, ISIS no 4560.
XX
KW   Inhibition; replication; herpes simplex virus; HSV; HIV;
KW   human cytomegalovirus; influenza virus; inflammation;
KW   neurological disorders; phospholipase A2 activity; hyperproliferation;
KW   malignancy; cardiovascular disease; snake bite; malignancy;
KW   telomere length; retard; aging; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .21
FT                   /*tag= a
FT                   /note= "Phosphorothionate intersugar linkages"
XX
PN   WO9408053-A1.
XX
PD   14-APR-1994.
XX
PF   29-SEP-1993;   93WO-US009297.
XX
PR   29-SEP-1992;   92US-00954185.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Hanecak RC,  Anderson KP,  Bennett CF,  Chiang M,  Brown-Driver VL;
PI   Ecker DJ,  Vickers TA,  Wyatt JR,  Imbach JL;
XX
DR   WPI; 1994-135613/16.
XX
PT   New modified oligo-nucleotide contg guanine quartet - inhibits activity
PT   of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
PT   of chromosomes.
XX
PS   Claim 5; Page 19; 144pp; English.
XX
CC   The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
CC   which contain a G4 or two G3 stretches and which may be used for
CC   inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
CC   such as these may also be used for inhibiting activity of HIV, human
CC   cytomegalovirus or influenza virus, or for treating inflammatory and
CC   neurological disorders caused by phospholipase A2 activity in cases of
CC   hyperproliferation, malignancy, cardiovascular disease and snake bite.
CC   They may also be used for inhibiting division of malignant cells by
CC   modualting telomere length, which may also retard aging. (Updated on 25-
CC   MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 0 A; 4 C; 17 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2920 GGGCGGGGCGTGGGGGGGCG 2939
              |||||||||| || ||||||
Db          2 GGGCGGGGCGGGGCGGGGCG 21


RESULT 819
AAQ97967
ID   AAQ97967 standard; DNA; 21 BP.
XX
AC   AAQ97967;
XX
DT   25-MAR-2003  (revised)
DT   19-OCT-1995  (first entry)
XX
DE   Peptide nucleic acid oligomer targetting HIV gene.
XX
KW   Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
KW   antiviral; antisense; triple helix; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .21
FT                   /*tag= a
FT                   /note= "at least one (and preferably all) of the backbone
FT                   subunits are composed of N-acetyl N-(2-aminoethyl)glycine
FT                   peptide residues, the nucleobase being attached
FT                   covalently to the acetyl group and the peptide linkage
FT                   being formed by condensation of the glycine carboxy group
FT                   of one residue with the amino group of the 2-aminoethyl
FT                   moiety in the next residue"
XX
PN   WO9504068-A1.
XX
PD   09-FEB-1995.
XX
PF   28-JUL-1994;   94WO-US008517.
XX
PR   29-JUL-1993;   93US-00099718.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ecker DJ;
XX
DR   WPI; 1995-082179/11.
XX
PT   Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid
PT   sub:unit - binds in complementary manner to DNA and RNA, and useful for
PT   modulating HIV viral activity, e.g. in treating AIDS.
XX
PS   Claim 2; Page 176; 186pp; English.
XX
CC   New peptide nucleic acid (PNA) oligomers are provided which (a) consist
CC   of naturally occurring nucleobases covalently bound to a polyamide
CC   backbone and (b) hybridise to the translation initiation AUG region, 5'
CC   untranslated region (5' UTR), 3' untranslated region (3' UTR), splice
CC   junctions or coding sequence of a human immunodeficiency virus gene
CC   chosen from env, gag, pol, rev and tat. The PNAs can be used to target
CC   RNA and single stranded DNA (ssDNA) to produce antisense-type gene
CC   regulation moieties. They have utility as gene-targetted drugs for
CC   modulating HIV processes. Hence they can be used to treat AIDS and other
CC   viral infections. They are also useful in diagnostic applications and as
CC   research tools. PNA oligomers have high affinity for complementary single
CC   stranded DNA. They are also able to form triple helices in which a first
CC   PNA strand binds with RNA or ssDNA and a second PNA strand binds with the
CC   resulting double helix or with the first PNA strand. The PNAs possess no
CC   significant charge and are water soluble, which facilitates cellular
CC   uptake. Further, since they contain amides of non-biological amino acids,
CC   they are biostable and resistant to enzymatic degradation by proteases.
CC   The present sequence is a specifically claimed PNA sequence (represented
CC   by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-
CC   2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 0 A; 4 C; 17 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2920 GGGCGGGGCGTGGGGGGGCG 2939
              |||||||||| || ||||||
Db          2 GGGCGGGGCGGGGCGGGGCG 21


RESULT 820
AAZ26593
ID   AAZ26593 standard; DNA; 21 BP.
XX
AC   AAZ26593;
XX
DT   30-NOV-1999  (first entry)
XX
```

DE Human polymorphic region 782.
XX
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN WO9841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US005419.
XX
PR 20-MAR-1997; 97US-0041057P.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman D, Ledley FD, Stanton VP;
XX
DR WPI; 1998-521232/44.
XX
PT Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT dysplastic lesions, endometriosis or graft versus host disease.
XX
PS Disclosure; Fig 7; 605pp; English.
XX
CC This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASI) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove
CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
CC human polymorphic sites described in the method of the invention
XX
SQ Sequence 21 BP; 3 A; 8 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1517 CCTGCAAGCCGCCCGAGGAG 1536
|||||| ||| |||||||||
Db 2 CCTGCAGGCCTCCCGAGGAG 21

RESULT 821
AAZ18215/c
ID AAZ18215 standard; DNA; 21 BP.
XX
AC AAZ18215;
XX
DT 11-OCT-1999 (first entry)
XX
DE Tyrosine kinase gene specific primer 408.
XX
KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
PD 08-JUL-1999.
XX
PF 28-DEC-1998; 98WO-IL000625.
XX
PR 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
PA (GENE-) GENENA LTD.
XX
PI Vider B;
XX
DR WPI; 1999-419113/35.
DR P-PSDB; AAY14749.
XX
PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
PS Claim 4; Page 48; 102pp; English.
XX
CC The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 21 BP; 6 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1798 AGTGACGTCTGGTCCTTTGG 1817
|||||||| ||| |||||||
Db 21 AGTGACGTGTGGGCCTTTGG 2

RESULT 822
ABX09456/c
ID ABX09456 standard; DNA; 21 BP.
XX
AC ABX09456;
XX
DT 22-JAN-2003 (first entry)
XX
DE Arteriosclerosis-detecting probe from HNF1 #2.
XX
KW Arteriosclerosis; diagnosis; hybridisation; synergism; gene therapy;
KW mutation; probe; ss.
XX
OS Homo sapiens.
XX

PN WO200272882-A2.
XX
PD 19-SEP-2002.
XX
PF 13-MAR-2002; 2002WO-EP002780.
XX
PR 13-MAR-2001; 2001DE-01011925.
XX
PA (OGHA-) OGHAM GMBH.
XX
PI Cullen P, Seedorf U;
XX
DR WPI; 2002-723374/78.
XX
PT Determining genetic risk of arteriosclerosis, for clinical diagnosis,
PT comprises hybridizing patient nucleic acid with an array of probes
PT derived from risk-associated reference genes and their mutations.
XX
PS Example 1; Page 126; 146pp; German.
XX
CC This invention describes a novel method for determining the genetic risk
CC of arteriosclerosis both for clinical diagnosis and for population
CC studies. The method comprises: (i) selecting risk-associated reference
CC nucleic acid sequences, including their functionally characterizing
CC mutations; (ii) applying probes from these sequences, or their
CC complements, to a carrier; (iii) hybridising the probes with a nucleic
CC acid from (or synthesised from) a patient sample; and (iv) detecting and
CC evaluating the hybridisation pattern. The method provides a quick,
CC inexpensive and informative diagnosis, and makes possible a
CC multifactorial analysis for detecting e.g. synergism between different
CC mutations or mutations that when present alone carry no risk but are risk
CC -associated in presence of other mutations. The results may be combined
CC with known risk-assessment methods to provide a more reliable diagnosis,
CC especially important with new therapeutic methods (e.g. gene therapy)
CC that are directed against specific genes. All relevant mutations in a
CC reference sequence can be screened for in a single test and the method is
CC well suited to automation. ABX09147-ABX09676 represent probes used to
CC illustrate the method of the invention
XX
SQ Sequence 21 BP; 2 A; 12 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2909 GGCATGGCCCTGGGCGGGGC 2928
||| |||||||||| |||||
Db 21 GGCCTGGCCCTGGGGGGGGC 2

RESULT 823
ADB73476/c
ID ADB73476 standard; DNA; 21 BP.
XX
AC ADB73476;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human B cell receptor fusions PCR primer FRGFR1 exons 12.
XX
KW Human; ss; MLL; cancer; AF-4; CDK-6; SEPTIN6; ALL;
KW acute lymphoblastic leukaemia; AML; acute myeloid leukaemia;
KW chromosomal break point; chromosome 11q23; ATF; BCR; B cell receptor;
KW primer; PCR.
XX
OS Homo sapiens.
XX
PN US2003096255-A1.
XX
PD 22-MAY-2003.
XX
PF 09-APR-2002; 2002US-00118783.
XX
PR 19-FEB-1997; 97US-0038624P.
PR 25-AUG-1997; 97US-0056938P.
PR 17-NOV-1997; 97US-0065911P.
PR 19-FEB-1998; 98US-00026033.
XX
PA (FELI/) FELIX C A.
PA (JONE/) JONES D H.
PA (RAPP/) RAPPAPORT E.
XX
PI Felix CA, Jones DH, Rappaport E;
XX
DR WPI; 2003-606415/57.
XX
PT Amplifying an unknown region that flanks a known region of a cancer-
PT associated DNA sequence by subjecting the panhandle structure to
PT extension and to PCR in the presence of a first primer homologous to the
PT second portion. .
XX
PS Claim 6; Page 42; 80pp; English.
XX
CC The invention relates to amplifying an unknown region that flanks a known
CC region of a cancer-associated DNA sequence comprising providing a
CC template polynucleotide, ligating a loop-forming oligonucleotide to the
CC 3'-end of the sense strand, annealing the loop-forming oligonucleotide
CC with the first portion to generate a panhandle structure, subjecting the
CC panhandle structure to extension, and subjecting the panhandle structure
CC to PCR in the presence of a first primer homologous to the second
CC portion, where the unknown region is amplified. In the method of
CC amplifying an unknown region that flanks a known region of a cancer-
CC associated DNA sequence, the template polynucleotide comprises a sense
CC strand, comprising the known and unknown regions. The unknown region is
CC nearer the 3'-end of the sense strand than is the known region. The known
CC region is comprises a first or second portion. The first portion is
CC nearer the unknown region than is the second portion. The loop-forming
CC oligonucleotide is complementary to the first portion. The third region
CC complementary to the second portion is generated at the free end of the
CC loop-forming oligonucleotide. The cancer-associated DNA sequence
CC comprises ATF1 (not defined) or BCR (B cell receptor). The method is
CC useful for amplifying an unknown region that flanks a known region of a
CC cancer-associated DNA sequence. Also disclosed as new is the use of the
CC method in the analysis of the breakpoint region of the human MLL gene,
CC where the chromosomal breaks results in gene fusions with AF-4, CDK-6 and
CC SEPTIN6 and are associated with ALL and AML (acute lymphoblastic
CC leukaemia and acute myeloid leukaemia). MLL is located on chromosome
CC 11q23. The present sequence is a PCR primer used the method of the
CC invention to isolate the unknown region adjacent to the BCR cancer gene.
XX
SQ Sequence 21 BP; 3 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1531 GAGGAGCAGCTCACCTTCAA 1550
|||||||||||| ||| |||
Db 20 GAGGAGCAGCTCTCCTCCAA 1

RESULT 824
ADP29168
ID ADP29168 standard; DNA; 21 BP.
XX
AC ADP29168;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human secreted protein encoding sequence SEQ ID #1166.
XX
KW Cytostatic; Antiinflammatory; Immunosuppressive; Antibacterial; Virucide;
KW cancer; inflammatory; immune; ds; human secreted protein.
XX
OS Homo sapiens.
XX

PN WO2004035732-A2.
XX
PD 29-APR-2004.
XX
PF 28-AUG-2003; 2003WO-US026780.
XX
PR 29-AUG-2002; 2002US-0406576P.
PR 29-AUG-2002; 2002US-0406579P.
PR 29-AUG-2002; 2002US-0406585P.
PR 29-AUG-2002; 2002US-0406588P.
PR 29-AUG-2002; 2002US-0406608P.
PR 29-AUG-2002; 2002US-0406611P.
PR 29-AUG-2002; 2002US-0406612P.
PR 29-AUG-2002; 2002US-0406616P.
PR 29-AUG-2002; 2002US-0406640P.
PR 29-AUG-2002; 2002US-0406642P.
PR 29-AUG-2002; 2002US-0406646P.
PR 29-AUG-2002; 2002US-0406653P.
PR 29-AUG-2002; 2002US-0406655P.
PR 29-AUG-2002; 2002US-0406666P.
PR 17-SEP-2002; 2002US-0410946P.
PR 17-SEP-2002; 2002US-0410947P.
PR 17-SEP-2002; 2002US-0410948P.
PR 17-SEP-2002; 2002US-0410949P.
PR 17-SEP-2002; 2002US-0410953P.
PR 17-SEP-2002; 2002US-0410957P.
PR 17-SEP-2002; 2002US-0410958P.
PR 17-SEP-2002; 2002US-0410959P.
PR 17-SEP-2002; 2002US-0410960P.
PR 17-SEP-2002; 2002US-0410961P.
PR 17-SEP-2002; 2002US-0410962P.
PR 17-SEP-2002; 2002US-0411019P.
PR 17-SEP-2002; 2002US-0411022P.
PR 17-SEP-2002; 2002US-0411023P.
PR 17-SEP-2002; 2002US-0411024P.
PR 17-SEP-2002; 2002US-0411032P.
PR 17-SEP-2002; 2002US-0411035P.
PR 17-SEP-2002; 2002US-0411037P.
PR 17-SEP-2002; 2002US-0411041P.
PR 17-SEP-2002; 2002US-0411045P.
PR 17-SEP-2002; 2002US-0411046P.
PR 17-SEP-2002; 2002US-0411048P.
PR 17-SEP-2002; 2002US-0411052P.
PR 17-SEP-2002; 2002US-0411055P.
PR 17-SEP-2002; 2002US-0411073P.
PR 17-SEP-2002; 2002US-0411082P.
PR 17-SEP-2002; 2002US-0411101P.
PR 17-SEP-2002; 2002US-0411111P.
PR 18-APR-2003; 2003US-0463700P.
PR 18-APR-2003; 2003US-0463708P.
PR 18-APR-2003; 2003US-0463716P.
PR 18-APR-2003; 2003US-0463732P.
PR 02-MAY-2003; 2003US-0467199P.
PR 02-MAY-2003; 2003US-0467201P.
PR 02-MAY-2003; 2003US-0467203P.
PR 02-MAY-2003; 2003US-0467230P.
PR 19-MAY-2003; 2003US-0471306P.
PR 19-MAY-2003; 2003US-0471336P.
PR 22-MAY-2003; 2003US-0472420P.
PR 22-MAY-2003; 2003US-0472430P.
PR 09-JUN-2003; 2003US-0476609P.
PR 09-JUN-2003; 2003US-0476641P.
PR 08-JUL-2003; 2003US-0485218P.
PR 08-JUL-2003; 2003US-0485223P.
PR 08-JUL-2003; 2003US-0485224P.
PR 08-JUL-2003; 2003US-0485325P.
PR 14-JUL-2003; 2003US-0486446P.
PR 14-JUL-2003; 2003US-0486480P.
PR 15-JUL-2003; 2003US-0486891P.
PR 15-JUL-2003; 2003US-0486960P.
PR 08-AUG-2003; 2003US-0493341P.
PR 08-AUG-2003; 2003US-0493370P.
PR 08-AUG-2003; 2003US-0493573P.
PR 08-AUG-2003; 2003US-0493577P.
XX
PA (FIVE-) FIVE PRIME THERAPEUTICS INC.
XX
PI Williams LT, Chu K, Lee E, Hestir K, Beaurang PA, Behrens D;
PI Halenbeck RF, Huang MM, Kothakota S, Haishan L, Linnemann T;
PI Pierce K, Wang Y, Wong JGP, Wu G, Zhang H;
XX
DR WPI; 2004-348438/32.
XX
PT New nucleic acid molecule for diagnosing, preventing or treating diseases
PT such as proliferative (e.g. cancer), inflammatory, immune, metabolic,
PT genetic, bacterial and viral diseases.
XX
PS Claim 1; SEQ ID NO 1166; 428pp; English.
XX
CC The present invention relates to an isolated nucleic acid molecule
CC encoding a polypeptide which is believed to be cytostatic,
CC antiinflammatory, immunosuppressive, antibacterial and virucidal. The
CC composition and methods are useful for diagnosing, preventing and
CC treating diseases such as proliferative (e.g. cancer), inflammatory,
CC immune, metabolic, genetic, bacterial and viral diseases. The present
CC sequence represents a human secreted protein encoding sequence. The
CC present sequence is available on WIPOWEB and is not in the specification.
XX
SQ Sequence 21 BP; 4 A; 1 C; 15 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 853 GAGGAGGAGCTGGTGGAGGC 872
||||||||| ||| ||||||
Db 2 GAGGAGGAGGTGGGGGAGGC 21

RESULT 825
ADH70559
ID ADH70559 standard; DNA; 22 BP.
XX
AC ADH70559;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human Vbeta gene repeat sequence #349.
XX
KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosome;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; ds.
XX
OS Homo sapiens.
XX
PN US2002150891-A1.
XX
PD 17-OCT-2002.
XX
PF 05-MAR-1999; 99US-00263959.
XX
PR 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX
PA (HOOD/) HOOD L E.
PA (ROWE/) ROWEN L.
XX

PI Hood LE, Rowen L;
XX
DR WPI; 2004-059052/06.
XX
PT Kit for diagnozing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX
PS Disclosure; SEQ ID NO 753; 164pp; English.
XX
CC The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies, Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ Sequence 22 BP; 9 A; 0 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3463 TATATATATCTATATATATA 3482
||||||||| ||||| ||||
Db 2 TATATATATGTATATGTATA 21

RESULT 826
AAV30066/c
ID AAV30066 standard; DNA; 22 BP.
XX
AC AAV30066;
XX
DT 13-AUG-1998 (first entry)
XX
DE PCR primer used to amplify the IL-12 p40 subunit.
XX
KW IL-12 p40 subunit; treatment; intracellular infection; mammal;
KW immunogenic portion; antigen; intracellular pathogen;
KW bacterial infection; legionella; tuberculosis; chlamydia;
KW parasitic infection; rickettsia; leshmaniasis; malaria; viral infection;
KW Herpes; HIV; FIV; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9812332-A1.
XX
PD 26-MAR-1998.
XX
PF 16-SEP-1997; 97WO-US016453.
XX
PR 17-SEP-1996; 96US-0025267P.
XX
PA (CHIR) CHIRON CORP.
PA (SCRI) SCRIPPS RES INST.
XX
PI Sallberg M, Milich DR, Lee WTL;
XX
DR WPI; 1998-217270/19.
XX
PT Vector construct directing expression of intracellular pathogenic antigen
PT - useful for, e.g. treatment of intracellular diseases in animals such as
PT tuberculosis and chlamydia.
XX
PS Example 2; Page 45; 141pp; English.
XX
CC PCR primers AAV30066-67 were used to amplify the IL-12 p40 sununit from
CC normal uninfected human peripheral blood mononucleocytes activated with
CC Staphylococcuc aureus. The amplified product is cloned and used to
CC exemplify the invention, which describes a method for treating
CC intracellular infections of warm-blooded mammals. This comprises
CC administering to the mammal a vector construct which directs the
CC expression of at least one immunogenic portion of an antigen derived from
CC an intracellular pathogen, and also administering a protein which
CC comprises the immunogenic portion of the antigen. The composition is used
CC to treat intracellular infections within warm-blooded animals e.g.
CC bacterial infections such as legionella, tuberculosis and chlamydia,
CC parasitic infections such as rickettsia, leshmaniasis or malaria and
CC viral infections like Hepatitis, Herpes, HIV and FIV
XX
SQ Sequence 22 BP; 7 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1820 TCCTGCTCTGGGAGATCTTC 1839
|| |||||||||||||| |
Db 20 TCTTGCTCTGGGAGATCTGC 1

RESULT 827
AAD21248/c
ID AAD21248 standard; DNA; 22 BP.
XX
AC AAD21248;
XX
DT 15-JAN-2002 (first entry)
XX
DE Human PBMC IL-12 p40 subunit amplifying sense PCR primer.
XX
KW Hepatitis B; hepatitis C; immunogen; HBV; HCV; hepatocellular carcinoma;
KW HCC; gene therapy; virucide; hepatotropic; antiinflammatory; cytostatic;
KW PCR primer; human; peripheral blood mononucleocyte; PBMC; interleukin-12;
KW IL-12 p40 subunit; ss.
XX
OS Homo sapiens.
XX
PN US6297048-B1.
XX
PD 02-OCT-2001.
XX
PF 07-JUN-1995; 95US-00483511.
XX
PR 04-FEB-1992; 92US-00830417.
PR 17-MAR-1993; 93US-00032385.
PR 04-AUG-1993; 93US-00102132.
PR 05-AUG-1994; 94US-00286829.
PR 19-JAN-1995; 95US-00374414.
XX
PA (CHIR) CHIRON CORP.
XX
PI Jolly DJ, Chang SMW, Lee WTL, Townsend K, O'dea J;
XX
DR WPI; 2001-647290/74.
XX
PT New vectors that direct the (co-)expression of one or more immunogenic
PT portions of the hepatitis B or C virus antigen(s), useful in gene
PT therapy, e.g. for treating or preventing hepatitis B or C infections, or

```
PT   hepatocellular carcinomas.
XX
PS   Example 2; Col 29; 64pp; English.
XX
CC   The present invention relates to a method for treating hepatitis B or C
CC   infections. The method involves administering a vector construct that
CC   directs the expression of at least one immunogenic portion of hepatitis B
CC   virus (HBV) antigen, containing HBeAg, HbcAg, HbsAg, S, Pre-S1, Pre-S2,
CC   open reading frame (ORF) 5, ORF 6, HBV pol or HBxAg or co-expression of
CC   at least one immunogenic portion of a HBV antigen and at least one
CC   immunogenic portion of a hepatitis C virus (HCV) antigen. The vectors are
CC   useful in gene therapy, particularly for treating or preventing hepatitis
CC   B and hepatitis C infections, as well as hepatocellular carcinomas (HCC).
CC   The present sequence is a PCR primer used for amplifying IL-12
CC   (interleukin-12) p40 subunit of human peripheral blood mononucleocytes
CC   (PBMC) used in the exemplification of the invention
XX
SQ   Sequence 22 BP; 7 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 22;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1820 TCCTGCTCTGGGAGATCTTC 1839
              || |||||||||||||||| |
Db         20 TCTTGCTCTGGGAGATCTGC 1


RESULT 828
ABL54523/c
ID   ABL54523 standard; DNA; 22 BP.
XX
AC   ABL54523;
XX
DT   27-MAY-2002  (first entry)
XX
DE   Pectinatus frisingensi 23S rRNA probe SEQ ID NO 17.
XX
KW   Pectinatus; 23S rRNA; Pectinatus cerevisiiphilus;
KW   Pectinatus frisingensis; beer; probe; ss.
XX
OS   Pectinatus frisingensis.
XX
PN   JP2002017356-A.
XX
PD   22-JAN-2002.
XX
PF   03-JUL-2000; 2000JP-00201258.
XX
PR   03-JUL-2000; 2000JP-00201258.
XX
PA   (ASAK ) ASAHI BREWERIES LTD.
XX
DR   WPI; 2002-247917/30.
XX
PT   A nucleic acid probe for detecting Pectinatus bacteria in beer, and
PT   detection of nucleic acids derived from the microbes.
XX
PS   Claim 3; Page 11; 14pp; Japanese.
XX
CC   The invention relates to a gene sequence encoding 23S rRNA of Pectinatus
CC   cerevisiiphilus (ABL54507). The invention includes a series of
CC   oligonucleotide probes including: a sequence (ABL54508-ABL54519)
CC   targeting 23S rDNA and 23S rRNA of a Pectinatus genus microbe for
CC   detecting P. cerevisiiphilus or its complementary sequence; a sequence
CC   (ABL54520-ABL54531) targeting 23S rDNA and 23S rRNA of a Pectinatus genus
CC   microbe for detecting P. frisingensis or its complementary sequence; a
CC   sequence (ABL54532-ABL54540) targeting 23S rDNA and 23S rRNA of a
CC   Pectinatus genus microbe for detecting a Pectinatus genus microbe. The
CC   method can be used for detecting a Pectinatus genus microbe in beer
XX
SQ   Sequence 22 BP; 5 A; 8 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 22;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1140 CGAGCTCGAGCTGCCTGCCG 1159
              || |||||||||||||||| |
Db         22 CGCGCTCGAGCTGCCTGCTG 3


RESULT 829
ABX80081/c
ID   ABX80081 standard; DNA; 22 BP.
XX
AC   ABX80081;
XX
DT   22-APR-2003  (first entry)
XX
DE   Human IL-2 cDNA PCR primer #1.
XX
KW   Hepatitis B virus; hepatitis C virus; hepatitis C infection; poliovirus;
KW   hepatitis B infection; hepatitis C antigen; polyprotein antigen; SV40;
KW   rhinovirus; pox virus; canary pox virus; vaccinia virus; influenza virus;
KW   adenovirus; parvovirus; adeno-associated virus; herpes virus; measles;
KW   corona virus; HIV; human immunodeficiency virus; Sindbis virus; IL-2; ss;
KW   interleukin-2; immunomodulatory cofactor B7; encephalomyocarditis virus;
KW   immunomodulatory cofactor GM-CSF; IRES; internal ribosome entry site;
KW   virucide; hepatotropic; retroviral vector; cytokine; PCR; primer; human.
XX
OS   Homo sapiens.
XX
PN   US2002141974-A1.
XX
PD   03-OCT-2002.
XX
PF   24-JUL-2001; 2001US-00912679.
XX
PR   04-FEB-1992;   92US-00830417.
PR   17-MAR-1993;   93US-00032385.
PR   04-AUG-1993;   93US-00102132.
PR   05-AUG-1994;   94US-00286829.
PR   19-JAN-1995;   95US-00374414.
PR   07-JUN-1995;   95US-00483511.
XX
PA   (JOLL/) JOLLY D J.
PA   (CHAN/) CHANG S M W.
PA   (LEEW/) LEE W T L.
PA   (TOWN/) TOWNSEND K.
PA   (ODEA/) O'DEA J.
XX
PI   Jolly DJ,  Chang SMW,  Lee WTL,  Townsend K,  O'dea J;
XX
DR   WPI; 2003-174125/17.
XX
PT   Treating hepatitis C infections in a warm-blooded animal by administering
PT   a vector construct, which directs the expression of an immunogenic
PT   portion of a hepatitis C antigen, and alternatively, with an
PT   immunomodulatory cofactor.
XX
PS   Example 2; Page 20; 70pp; English.
XX
CC   The invention relates to a method for treating hepatitis C infections in
CC   a warm-blooded animal comprising administering a vector construct which
CC   directs the expression of at least one immunogenic portion of a hepatitis
CC   C antigen, where an immune response is generated, and alternatively, in
CC   combination with an immunomodulatory cofactor. The invention also relates
CC   to a vector construct which directs the co-expression of at least one
CC   immunogenic portion of a hepatitis B antigen and at least one immunogenic
CC   portion of a hepatitis C antigen, an immunogenic portion of the
CC   polyprotein antigen, or an immunogenic portion of the polyprotein antigen
CC   and an immunoregulatory cofactor. A recombinant virus carrying the vector
CC   construct is selected from poliovirus, rhinovirus, pox virus, canary pox
CC   virus, vaccinia virus, influenza virus, adenovirus, parvovirus, adeno-
CC   associated virus, herpes virus, SV40, HIV, measles, corona virus or
```

```
CC   Sindbis virus. This sequence represents a PCR primer used in the method
CC   of the invention
XX
SQ   Sequence 22 BP; 7 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 22;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1820 TCCTGCTCTGGGAGATCTTC 1839
              || ||||||||||||||| |
Db         20 TCTTGCTCTGGGAGATCTGC 1


RESULT 830
ABX96942/c
ID   ABX96942 standard; DNA; 22 BP.
XX
AC   ABX96942;
XX
DT   15-MAY-2003  (first entry)
XX
DE   Interleukin-12 (IL-12) DNA PCR primer #1.
XX
KW   Human; HBV; HCV; interleukin-2; interleukin-12; interleukin-10; PCR; ss;
KW   hepatitis B virus; hepatitis C virus; intracellular infection; HSV; HIV;
KW   viral infection; herpes simplex virus; human immunodeficiency virus; FIV;
KW   feline immunodeficiency virus; parasitic infection; rickettsia; malaria;
KW   leishmaniasis; bacterial disease; legionella; tuberculosis; chlamydia;
KW   interleukin-4; IL-12; IL-2; IL-10; IL-4; internal ribosome entry site;
KW   interferon-gamma; IFN-gamma; IRES; immunomodulatory cofactor; B7; GM-CSF;
KW   granulocyte-macrophage colony-stimulating factor; KT3-L1; primer.
XX
OS   Homo sapiens.
XX
PN   US2002165172-A1.
XX
PD   07-NOV-2002.
XX
PF   17-DEC-1999;   99US-00466035.
XX
PR   16-SEP-1997;   97US-00931031.
XX
PA   (SALL/) SALLBERG M.
PA   (MILI/) MILICH D R.
PA   (LEEW/) LEE W T L.
XX
PI   Sallberg M,  Milich DR,  Lee WTL;
XX
DR   WPI; 2003-288144/28.
XX
PT   Treating intracellular infections, e.g. viral, parasitic and bacterial
PT   diseases, comprises administering a vector construct which directs the
PT   expression of an immunogenic portion of an antigen from an intracellular
PT   pathogen.
XX
PS   Example 2; Page 18; 69pp; English.
XX
CC   The invention relates to a method for treating intracellular infections
CC   within warm-blooded animals comprising administering to a warm-blooded
CC   animal a vector construct which directs the expression of at least one
CC   immunogenic portion of an antigen derived from an intracellular pathogen,
CC   and a protein having the immunogenic portion of the antigen to generate
CC   an immune response. The method is useful for treating intracellular
CC   infections or diseases including viral infections (e.g. hepatitis B virus
CC   (HBV), hepatitis C virus (HCV), herpes simplex virus (HSV), human
CC   immunodeficiency virus (HIV) or feline immunodeficiency virus (FIV)),
CC   parasitic infections (e.g. rickettsia, leishmaniasis or malaria) and
CC   certain bacterial diseases (e.g. legionella, tuberculosis or chlamydia).
CC   Sequences ABX96883-ABX96937 and ABX96940-ABX96965 represent PCR primers
CC   used in the method of the invention
XX
SQ   Sequence 22 BP; 7 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 22;
  Best Local Similarity   90.0%;  Pred. No. 1.1e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1820 TCCTGCTCTGGGAGATCTTC 1839
              || ||||||||||||||| |
Db         20 TCTTGCTCTGGGAGATCTGC 1


RESULT 831
AAF29247
ID   AAF29247 standard; DNA; 23 BP.
XX
AC   AAF29247;
XX
DT   17-APR-2001  (first entry)
XX
DE   PCR primer for amplification of antibody KKO H chain V region cDNA.
XX
KW   Antibody; platelet factor 4; heparin; PF4/heparin complex; mouse; HIT;
KW   heparin induced thrombocytopaenia; heparin induced thrombosis; HITT;
KW   PCR primer; KKO; ss.
XX
OS   Mus musculus.
XX
PN   WO200104159-A1.
XX
PD   18-JAN-2001.
XX
PF   13-JUL-2000; 2000WO-US019000.
XX
PR   13-JUL-1999;   99US-0143536P.
XX
PA   (SCTE-) SCI & TECHNOLOGY CORP @UNM.
XX
PI   Arepally G,  Kisiel W,  Kamei K,  Kamei S;
XX
DR   WPI; 2001-138321/14.
XX
PT   Composition for the diagnosis and treatment of heparin induced
PT   thrombocytopenia/thrombosis, comprises an antibody that preferentially
PT   binds with a Platelet Factor 4/heparin complex.
XX
PS   Example 1; Page 47; 80pp; English.
XX
CC   This invention relates to a composition comprising a monoclonal antibody
CC   which binds specifically with a Platelet Factor 4 (PF4)/heparin complex.
CC   The antibody preferentially binds to the complex relative to the binding
CC   of the antibody with either of the components alone. Methods are included
CC   for the production of the antibody and its use in the diagnosis of
CC   various diseases. The composition can be used for diagnosing heparin
CC   induced thrombocytopaenia/thrombosis, HIT/HITT. The composition can also
CC   be used for assessing the level of a polyclonal antibody that binds
CC   specifically within a bodily fluid or tissue sample. The present sequence
CC   represents a PCR primer used to amplify cDNA encoding the variable region
CC   of the heavy chain of the antibody of the invention which is referred to
CC   as KKO
XX
SQ   Sequence 23 BP; 4 A; 2 C; 12 G; 3 T; 0 U; 2 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   81.8%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||||| |:|
Db          1 GAGGTGAAGCTGGTGGAGWCWG 22


RESULT 832
AAC83856
ID   AAC83856 standard; DNA; 23 BP.
```

```
XX
AC   AAC83856;
XX
DT   02-MAR-2001  (first entry)
XX
DE   VH back PCR primer #5.
XX
KW   Human; Fab fragment; antigen-binding; antibody; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1054018-A1.
XX
PD   22-NOV-2000.
XX
PF   18-MAY-1999;   99EP-00201558.
XX
PR   18-MAY-1999;   99EP-00201558.
XX
PA   (TARG-) TARGET QUEST BV.
XX
PI   Hoogenboom HRJM;
XX
DR   WPI; 2001-042369/06.
XX
PT   Phage display libraries of human Fab fragments useful for isolating high-
PT   affinity antibodies against specific target comprises polynucleotides
PT   encoding CDR containing domains of heavy chain and light chain genes.
XX
PS   Disclosure; Fig 2; 74pp; English.
XX
CC   The present invention relates to a human Fab fragment library. The Fab
CC   fragment library is useful for selecting an antigen-binding Fab using in
CC   vitro selection on immobilised or labelled antigen such as monoclonal Fab
CC   or polyclonal collection of Fab clones that specifically bind to MUC1.
CC   The obtained antibodies are useful as research reagents or as therapeutic
CC   products and also are important for target validation and target
CC   discovery in the area of functional genomics. The Fab library is a
CC   valuable source of antibodies for many different targets, and is useful
CC   to screen off-rates for a large series of the antigen specific Fabs. The
CC   present sequence is a PCR primer used to construct the Fab library of the
CC   present invention
XX
SQ   Sequence 23 BP; 3 A; 3 C; 12 G; 3 T; 0 U; 2 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   81.8%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||||||| |:|
Db          1 GAGGTGCAGCTGGTGGAGWCYG 22


RESULT 833
AAC83855
ID   AAC83855 standard; DNA; 23 BP.
XX
AC   AAC83855;
XX
DT   02-MAR-2001  (first entry)
XX
DE   VH back PCR primer #4.
XX
KW   Human; Fab fragment; antigen-binding; antibody; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1054018-A1.
XX
PD   22-NOV-2000.
XX
PF   18-MAY-1999;   99EP-00201558.
XX
PR   18-MAY-1999;   99EP-00201558.
XX
PA   (TARG-) TARGET QUEST BV.
XX
PI   Hoogenboom HRJM;
XX
DR   WPI; 2001-042369/06.
XX
PT   Phage display libraries of human Fab fragments useful for isolating high-
PT   affinity antibodies against specific target comprises polynucleotides
PT   encoding CDR containing domains of heavy chain and light chain genes.
XX
PS   Disclosure; Fig 2; 74pp; English.
XX
CC   The present invention relates to a human Fab fragment library. The Fab
CC   fragment library is useful for selecting an antigen-binding Fab using in
CC   vitro selection on immobilised or labelled antigen such as monoclonal Fab
CC   or polyclonal collection of Fab clones that specifically bind to MUC1.
CC   The obtained antibodies are useful as research reagents or as therapeutic
CC   products and also are important for target validation and target
CC   discovery in the area of functional genomics. The Fab library is a
CC   valuable source of antibodies for many different targets, and is useful
CC   to screen off-rates for a large series of the antigen specific Fabs. The
CC   present sequence is a PCR primer used to construct the Fab library of the
CC   present invention
XX
SQ   Sequence 23 BP; 3 A; 3 C; 11 G; 5 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   81.8%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              :||| | |||||||||| |||
Db          1 SAGGTGCAGCTGGTGGAGTCTG 22


RESULT 834
ABL99446
ID   ABL99446 standard; DNA; 23 BP.
XX
AC   ABL99446;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Left PCR primer used to target prostaglandin D synthase canine gene.
XX
KW   Canine gene array; toxicological response; ss.
XX
OS   Canis sp.
XX
PN   WO200208453-A2.
XX
PD   31-JAN-2002.
XX
PF   23-JUL-2001; 2001WO-US023311.
XX
PR   21-JUL-2000; 2000US-0220057P.
XX
PA   (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY.
XX
PI   Farr SB,  Pickett GG,  Neft RE,  Dunn RT;
XX
DR   WPI; 2002-217063/27.
XX
PT   Identifying toxicologically relevant canine gene to determine
PT   toxicological responses of agents, by obtaining and comparing gene
PT   expression profiles of untreated canine cells and canine cells treated
PT   with an agent.
XX
PS   Example 5; Page 52; 140pp; English.
XX
```

```
CC   This invention relates to identifying a toxicologically relevant canine
CC   gene and the generation of an array of toxicologically relevant canine
CC   genes. The gene array is useful for obtaining a gene expression profile,
CC   by exposing a population of cells to an agent, obtaining cDNA from the
CC   population of cells, labeling the cDNA, and contacting the cDNA with the
CC   gene array. The relevant gene is useful for making and using arrays to
CC   determine toxicological responses to various agents, and also useful for
CC   identifying novel gene sequences and novel canine genes. The method for
CC   analysing toxicological responses using the canine gene array is rapid
CC   and efficient. The present sequence is related to the canine gene array
XX
SQ   Sequence 23 BP; 4 A; 9 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1040 AGGTGTCCCTGGAGTCCAAC 1059
              |||||||||| || |||||
Db          1 AGGTGTCCCTGCAGCCCAAC 20


RESULT 835
ACF06327
ID   ACF06327 standard; DNA; 23 BP.
XX
AC   ACF06327;
XX
DT   07-OCT-2003  (first entry)
XX
DE   Zebrafish vasa PCR primer SEQ ID NO:3.
XX
KW   Zebrafish; fish embryo cell line; chimeric fish; genetic; human disease;
KW   vasa; PCR primer; ss.
XX
OS   Danio rerio.
OS   Synthetic.
XX
PN   WO2003051109-A1.
XX
PD   26-JUN-2003.
XX
PF   13-DEC-2002; 2002WO-US039913.
XX
PR   13-DEC-2001; 2001US-0341355P.
PR   12-FEB-2002; 2002CA-02371460.
XX
PA   (PURD ) PURDUE RES FOUND.
XX
PI   Collodi P,  Fan L,  Ma C;
XX
DR   WPI; 2003-532958/50.
XX
PT   New zebrafish embryo cell line, which becomes a germ cell when introduced
PT   to a fish embryo, useful for making a germ line chimeric zebrafish, which
PT   is a valuable model for genetic studies of human diseases.
XX
PS   Example 2; Page 23; 45pp; English.
XX
CC   The present invention describes a fish embryo cell line, where a cell of
CC   the fish embryo cell line, after incubation in vitro for at least 24
CC   hours, will become a germ cell when introduced to a fish embryo. Also
CC   described: (1) making the fish embryo cell line; (2) an isolated fish
CC   embryo cell line obtained by the method of (1); (3) making a germ line
CC   chimeric fish; (4) a germ line chimeric fish obtained by the method of
CC   (3); and (5) cell culture media comprising a growth factor and fish cell
CC   conditioned medium, or a growth factor and a fish cell, where the growth
CC   factor is fibroblast growth factor or epidermal growth factor. The fish
CC   embryo cell line is useful for making a germ line chimeric fish,
CC   particularly zebrafish, which is a valuable model for genetic studies of
CC   human diseases. The present sequence represents a PCR primer for
CC   zebrafish vasa, which is used in an example from the present invention
XX
SQ   Sequence 23 BP; 5 A; 4 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        646 GTGGAGGTGAATGGCAGCAA 665
              ||||| |||| |||||||||
Db          2 GTGGACGTGAGTGGCAGCAA 21


RESULT 836
AAL62076
ID   AAL62076 standard; DNA; 23 BP.
XX
AC   AAL62076;
XX
DT   22-SEP-2003  (first entry)
XX
DE   Human VH region amplifying antisense PCR primer, VH3B-Back.
XX
KW   Micro-scaffold; immunoglobulin; complementarity determining region; CDR;
KW   human; heavy chain variable region; VH; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003050531-A2.
XX
PD   19-JUN-2003.
XX
PF   11-DEC-2002; 2002WO-BE000189.
XX
PR   11-DEC-2001; 2001EP-00870274.
XX
PA   (ALGO-) ALGONOMICS NV.
PA   (ABLY-) ABLYNX NV.
XX
PI   Lasters I,  Pletinckx J,  Boutonnet N,  Lauwereys M,  Beirnaert E;
XX
DR   WPI; 2003-577302/54.
XX
PT   New isolated polypeptide micro-scaffold displaying immunoglobulin
PT   complementarity determining region (CDR) 2 or CDR3 polypeptide sequences,
PT   useful for searching, selecting and screening for immunoglobulin CDR2 or
PT   CDR3 polypeptide sequences.
XX
PS   Example 1; Page 29; 90pp; English.
XX
CC   The invention relates to an isolated polypeptide micro-scaffold
CC   displaying immunoglobulin complementarity determining region (CDR)-2 or
CC   CDR3 polypeptide sequences, comprising a CDR2 or CDR3 polypeptide
CC   sequence interconnecting fragments of the adjacent framework polypeptide
CC   sequences, which are arranged to form two anti-parallel beta-strands. The
CC   polypeptide micro-scaffold and the nucleotide sequences are useful for
CC   searching, selecting and screening for immunoglobulin CDR2 or CDR3
CC   polypeptide sequences. The present sequence is a PCR primer used for the
CC   primary amplification of human heavy chain variable region (VH)
XX
SQ   Sequence 23 BP; 3 A; 3 C; 11 G; 5 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   81.8%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              :||| | |||||||||||| |||
Db          1 SAGGTGCAGCTGGTGGAGTCTG 22


RESULT 837
ACF05339
ID   ACF05339 standard; DNA; 23 BP.
XX
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```
AC   ACF05339;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human VH gene framework region 1 PCR primer.
XX
KW   Antibody; immunoglobulin; variable domain; human; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003054016-A2.
XX
PD   03-JUL-2003.
XX
PF   20-DEC-2002; 2002WO-EP014662.
XX
PR   21-DEC-2001; 2001EP-00205100.
XX
PA   (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI   Muyldermans S;
XX
DR   WPI; 2003-559124/52.
XX
PT   Cloning polynucleotide sequences encoding immunoglobulin variable domains
PT   (IGVD) for the manufacture of a medicament by cloning the resulting
PT   variable domain fragment sequences into a vector.
XX
PS   Example 3; Page 22; 31pp; English.
XX
CC   The present sequence is that of a PCR primer annealing to framework
CC   region 1 of human heavy chain variable region (VH) genes. The primer was
CC   used, with an oligo-dT primer, in the amplification of a human
CC   immunoglobulin repertoire using cDNA derived from the blood of human
CC   donors as template. This provides an example of the method of the
CC   invention, which relates to the cloning of immunoglobulin variable
CC   domains (IGVD) and the construction of IGVD expression libraries. The
CC   method involves first strand cDNA synthesis from mRNA using a universal
CC   primer, performing second strand cDNA synthesis using a first primer
CC   capable of hybridising to a site at, or adjacent to, the 3' end of each
CC   of the IGVD sequences on the antisense strand, cleaving the double-
CC   stranded DNA with a restriction enzyme to produce double-stranded DNA
CC   encoding a functional IGVD fragment, and cloning the resulting variable
CC   domain fragment sequences into a vector
XX
SQ   Sequence 23 BP; 3 A; 3 C; 11 G; 5 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   81.8%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              :||| | |||||||||||| |||
Db          1 SAGGTGCAGCTGGTGGAGTCTG 22


RESULT 838
ADK95382/c
ID   ADK95382 standard; DNA; 23 BP.
XX
AC   ADK95382;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #1102.
XX
KW   human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS   Synthetic.
XX
PN   JP2003259875-A.
XX
PD   16-SEP-2003.
XX
PF   08-MAR-2002; 2002JP-00064373.
XX
PR   08-MAR-2002; 2002JP-00064373.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2004-093977/10.
XX
PT   Novel polynucleotide useful for PCR amplification along with two DNA
PT   fragment from another set of sequences, or for detecting single
PT   nucleotide polymorphism in human gene.
XX
PS   Claim 2; SEQ ID NO 4411; 2627pp; Japanese.
XX
CC   The present invention relates to a polynucleotide isolated from a human
CC   gene and is useful for detecting a single nucleotide polymorphism in a
CC   human gene or for diagnosing of disease. The invention enables the
CC   detection of a single nucleotide polymorphism in a human gene. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 23 BP; 10 A; 10 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2318 TGTGTGTGTGTGTGTGCGTG 2337
              ||||||| |||||||| |||
Db         20 TGTGTGTATGTGTGTGTGTG 1


RESULT 839
ADP03730
ID   ADP03730 standard; DNA; 23 BP.
XX
AC   ADP03730;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Antibody related primer, SEQ ID 103.
XX
KW   Cytostatic; Antiarteriosclerotic; Antiinflammatory; Immunosuppressive;
KW   human; antibody; cancer lesion; arteriosclerosis; inflammatory disease;
KW   autoimmune disease; cancer; primer; ss.
XX
OS   Synthetic.
XX
PN   WO2004048571-A1.
XX
PD   10-JUN-2004.
XX
PF   21-NOV-2003; 2003WO-JP014919.
XX
PR   22-NOV-2002; 2002JP-00339241.
XX
PA   (CHUS ) CHUGAI SEIYAKU KK.
PA   (PHAR-) PHARMALOGICALS RES PTE LTD.
XX
PI   Tsuchiya M,  Suzuki M,  Yoshida K,  Fujii E,  Matsubara K,  Tsunoda H;
XX
DR   WPI; 2004-450382/42.
XX
PT   Isolating polynucleotide that encodes antibody which acts against
PT   lesioned tissue, involves isolating B cells that is infiltrated into
PT   lesioned tissue, and acquiring polynucleotide that encodes antibody from
PT   isolated B cells.
XX
PS   Example 3; SEQ ID NO 103; 200pp; Japanese.
XX
CC   The present invention relates to novel antibody sequences, which acts
CC   against lesioned tissue. Also claimed is a method (M1) for isolating
CC   polynucleotide encoding the antibodies, which involves (a) isolating B
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CC   cells that is infiltrated into lesioned tissue, and (b) acquiring
CC   polynucleotide that encodes an antibody from the isolated B cells. The
CC   antibodies are useful for treating cancer lesions, arteriosclerosis,
CC   inflammatory disease or autoimmune disease. The present sequence was used
CC   to illustrate the invention.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 11 G; 5 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 23;
  Best Local Similarity   81.8%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              ||:| | |||||||||||| |||
Db          1 GARGTGCAGCTGGTGGAGTCTG 22


RESULT 840
AAT39968/c
ID   AAT39968 standard; DNA; 24 BP.
XX
AC   AAT39968;
XX
DT   24-JUN-1997  (first entry)
XX
DE   Minimal motif coding sequence ZGR1/ZGR2.
XX
KW   Epstein-Barr virus; EBV; nuclear antigen; EBVNA1; antigenic protein;
KW   Glycine-rich repeat sequence; immune system; regulatory protein; enzyme;
KW   cytokine; lymphokine; cell adhesion molecule; costimulatory molecule;
KW   drug resistance; tumour suppressant; genetic disease; viral disease;
KW   enzyme disorder; Gaucher's disease; cancer; immune system disorder; GRRS;
KW   gene therapy; minimal motif; ds.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .4
FT                   /*tag=  a
FT                   /note= "5' overhang"
FT   misc_feature    complement(24)
FT                   /*tag=  b
FT                   /note= "5' overhang of TTCC"
XX
PN   WO9632483-A1.
XX
PD   17-OCT-1996.
XX
PF   10-APR-1996;   96WO-GB000876.
XX
PR   10-APR-1995;   95SE-00001324.
PR   01-SEP-1995;   95US-00522995.
PR   15-SEP-1995;   95US-00529190.
XX
PA   (MASU/) MASUCCI M.
XX
PI   Masucci M;
XX
DR   WPI; 1996-477134/47.
DR   P-PSDB; AAW05707.
XX
PT   New proteins containing GRRS which are invisible to the immune system -
PT   used for treating cancer, immune system disorders, viral diseases, etc.
XX
PS   Example 1; Page 43; 61pp; English.
XX
CC   AAT39966-T39973 represent double stranded coding sequences for minimal
CC   motifs of glycine-rich repeat sequences (GRRS). Full length GRRS
CC   sequences, such as the Epstein-Barr virus strain B95.8 nuclear antigen
CC   (EBNA1) represented by AAW05704, can be used in the method of the
CC   invention. The method of the invention is for making an antigenic protein
CC   invisible to the immune system, and consists of inserting a GRRS into the
CC   antigenic protein. The method can be used to insert a GRRS into
CC   therapeutic proteins, marker genes, regulatory proteins of viral vectors,
CC   or vaccine components. The therapeutic proteins include enzymes,
CC   cytokines, lymphokines, cell adhesion molecules, costimulatory molecules,
CC   or protein products of drug resistant genes or tumour suppressor genes.
CC   The antigenic proteins or corresponding nucleic acids are used to treat
CC   genetic and viral diseases, especially enzyme disorders such as Gaucher's
CC   disease, cancer, immune system disorders and other diseases treatable by
CC   gene therapy
XX
SQ   Sequence 24 BP; 5 A; 2 C; 14 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2104 ACCCCCAGCTCCAGCTCCTC 2123
              |||| || ||||||||||||
Db         24 ACCCGCACCTCCAGCTCCTC 5


RESULT 841
AAV55819
ID   AAV55819 standard; DNA; 24 BP.
XX
AC   AAV55819;
XX
DT   27-AUG-2003  (revised)
DT   18-NOV-1998  (first entry)
XX
DE   Multimerisation of minimal motifs using primer ZGE2.
XX
KW   Fusion protein; stabilising polypeptide; proteolytic degradation;
KW   resistance; half-life; autoimmune disease; inflammation; nitro drug;
KW   IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
KW   nitroreductase protein; enzyme therapy; prodrug therapy; protease;
KW   cancer; pathological condition; minimal motif; PCR primer; ss.
XX
OS   Synthetic.
OS   Human herpesvirus 4.
XX
PN   WO9822577-A1.
XX
PD   28-MAY-1998.
XX
PF   17-NOV-1997;   97WO-IB001508.
XX
PR   15-NOV-1996;   96US-0030986P.
PR   25-JUN-1997;   97US-0048945P.
XX
PA   (MASU/) MASUCCI M G.
XX
PI   Masucci MG;
XX
DR   WPI; 1998-312463/27.
XX
PT   New fusion proteins resistant to proteolytic degradation - comprising a
PT   core protein with a stabilising polypeptide comprising a peptide sequence
PT   containing glycine repeats.
XX
PS   Disclosure; Page 72; 120pp; English.
XX
CC   Sequences shown in AAV55812 to AAV55827 represent primers used in the
CC   course of the invention for the multimerisation of minimal motifs. The
CC   invention provides a method for increasing the resistance of a core
CC   protein to proteolytic degradation that comprises linking or inserting
CC   onto or into the core protein a stabilising polypeptide of formula
CC   [(Glya)X(Glyb)Y(Glyc)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly
CC   residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
CC   and n can be anything between 1-66. X, Y and Z need not be identical from
CC   n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
CC   polypeptide can be linked onto or inserted into a nucleic acid encoding a
CC   core protein. The fusion proteins of the invention are more resistant to
CC   degradation by proteases and, thus, have a longer half-life than the
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CC   unfused core protein. The products can be used for treating autoimmune
CC   diseases, cancer and inflammation. In particular, the core protein may be
CC   an IkappaB regulator protein for the treatment of inflammatory bowel
CC   disease, or a nitroreductase protein which can activate nitro drugs in
CC   enzyme/prodrug therapy to treat cancer or other pathological conditions.
CC   The fusion proteins can also be used in diagnostic methods such as in
CC   vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ   Sequence 24 BP; 3 A; 14 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2103 CACCCCCAGCTCCAGCTCCT 2122
              ||||| || ||||||||||||
Db          4 CACCCGCACCTCCAGCTCCT 23


RESULT 842
AAV55816/c
ID   AAV55816 standard; DNA; 24 BP.
XX
AC   AAV55816;
XX
DT   27-AUG-2003  (revised)
DT   18-NOV-1998  (first entry)
XX
DE   Multimerisation of minimal motifs using primer ZGR1.
XX
KW   Fusion protein; stabilising polypeptide; proteolytic degradation;
KW   resistance; half-life; autoimmune disease; inflammation; nitro drug;
KW   IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
KW   nitroreductase protein; enzyme therapy; prodrug therapy; protease;
KW   cancer; pathological condition; minimal motif; PCR primer; ss.
XX
OS   Synthetic.
OS   Human herpesvirus 4.
XX
PN   WO9822577-A1.
XX
PD   28-MAY-1998.
XX
PF   17-NOV-1997;   97WO-IB001508.
XX
PR   15-NOV-1996;   96US-0030986P.
PR   25-JUN-1997;   97US-0048945P.
XX
PA   (MASU/) MASUCCI M G.
XX
PI   Masucci MG;
XX
DR   WPI; 1998-312463/27.
XX
PT   New fusion proteins resistant to proteolytic degradation - comprising a
PT   core protein with a stabilising polypeptide comprising a peptide sequence
PT   containing glycine repeats.
XX
PS   Disclosure; Page 72; 120pp; English.
XX
CC   Sequences shown in AAV55812 to AAV55827 represent primers used in the
CC   course of the invention for the multimerisation of minimal motifs. The
CC   invention provides a method for increasing the resistance of a core
CC   protein to proteolytic degradation that comprises linking or inserting
CC   onto or into the core protein a stabilising polypeptide of formula
CC   [(Glya)X(Glyb)Y(Glyc)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly
CC   residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
CC   and n can be anything between 1-66. X, Y and Z need not be identical from
CC   n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
CC   polypeptide can be linked onto or inserted into a nucleic acid encoding a
CC   core protein. The fusion proteins of the invention are more resistant to
CC   degradation by proteases and, thus, have a longer half-life than the
CC   unfused core protein. The products can be used for treating autoimmune
CC   diseases, cancer and inflammation. In particular, the core protein may be
CC   an IkappaB regulator protein for the treatment of inflammatory bowel
CC   disease, or a nitroreductase protein which can activate nitro drugs in
CC   enzyme/prodrug therapy to treat cancer or other pathological conditions.
CC   The fusion proteins can also be used in diagnostic methods such as in
CC   vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ   Sequence 24 BP; 5 A; 2 C; 14 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2104 ACCCCCAGCTCCAGCTCCTC 2123
              |||| || ||||||||||||
Db         24 ACCCGCACCTCCAGCTCCTC 5


RESULT 843
AAX26955
ID   AAX26955 standard; DNA; 24 BP.
XX
AC   AAX26955;
XX
DT   24-JUN-1999  (first entry)
XX
DE   PCR primer GR1/51F used to identify mutations in exon 6 of APECED gene.
XX
KW   Autoimmune regulator; AIR; immune maturation; immune response; disease;
KW   autoimmune polyendocrinopathy candidiasis ectodermal dystrophy; APECED;
KW   autoimmune polyglandular syndrome type I; APS I; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9915559-A1.
XX
PD   01-APR-1999.
XX
PF   23-SEP-1998;   98WO-FI000749.
XX
PR   23-SEP-1997;   97FI-00003762.
XX
PA   (FIIM-) FINNISH IMMUNOTECHNOLOGY LTD.
XX
PI   Krohn K,  Heino M,  Peterson P,  Scott H,  Antonarakis S,  Lalioti M;
PI   Shimizu N,  Kudoh J;
XX
DR   WPI; 1999-244390/20.
XX
PT   Autoimmune regulator 1 (AIR1) DNA sequence.
XX
PS   Example 3; Page 13; 59pp; English.
XX
CC   PCR primers AAX26955-56 were used to identify mutations in exon 6 of the
CC   autoimmune polyendocrinopathy candidiasis ectodermal dystrophy (APECED)
CC   (also known as autoimmune polyglandular syndrome type I (APS I)) gene.
CC   The mutated and normal genes give PCR products of different sizes, the
CC   products being 285 and 225 bp, respectively. The specification describes
CC   autoimmune regulator proteins (AIR-1, AIR-2, and AIR-3). The AIR
CC   polypeptides and polynucleotides can be used in methods for the diagnosis
CC   and treatment of diseases related to immune maturation and regulation of
CC   immune response towards self and nonself. They can be used particularly
CC   in the diagnosis and treatment of APECED
XX
SQ   Sequence 24 BP; 6 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1600 GCCTCCCAGAAGTGCATCCA 1619
              | |||| ||||||||||||||
```

```
Db          3 GGCTCCAAGAAGTGCATCCA 22


RESULT 844
AAZ90146
ID   AAZ90146 standard; DNA; 24 BP.
XX
AC   AAZ90146;
XX
DT   19-MAY-2000  (first entry)
XX
DE   Fibronectin inhibitor oligonucleotide #3.
XX
KW   Fibronectin inhibitor; GBP-1; cell growth; cancer; cell aging; ss.
XX
OS   Unidentified.
XX
PN   JP2000014385-A.
XX
PD   18-JAN-2000.
XX
PF   06-JUL-1998;   98JP-00190001.
XX
PR   06-JUL-1998;   98JP-00190001.
XX
PA   (SUME ) SUMITOMO ELECTRIC IND CO.
XX
DR   WPI; 2000-154339/14.
XX
PT   A DNA coding a protein inhibiting the expression of fibronectin gene -
PT   used for research of expression inhibition of fibronectin related to cell
PT   growth, cancer and cell ageing.
XX
PS   Claim 4; Page 13; 21pp; Japanese.
XX
CC   This sequence represents a fibronectin inhibitor oligonucleotide. The
CC   invention relates to a fibronectin inhibitor protein GBP-1. The GBP-1
CC   protein inhibits the expression of the fibronectin gene. The protein
CC   sequence can be used to produce antibodies against the GBP-1 protein. The
CC   GBP-1 DNA, protein and antibody sequences can be used for the research of
CC   expression inhibition of fibronectin in relation to cell growth, cancer
CC   and cell aging
XX
SQ   Sequence 24 BP; 3 A; 4 C; 14 G; 3 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2928 CGTGGGGGGGCGTGGAGGGA 2947
              ||||||||||||  | |||||
Db          3 CGTGGGGGGGCGGGAAGGGA 22


RESULT 845
AAZ90153
ID   AAZ90153 standard; DNA; 24 BP.
XX
AC   AAZ90153;
XX
DT   19-MAY-2000  (first entry)
XX
DE   Fibronectin inhibitor oligonucleotide #6.
XX
KW   Fibronectin inhibitor; GBP-1; cell growth; cancer; cell aging; ss.
XX
OS   Unidentified.
XX
PN   JP2000014385-A.
XX
PD   18-JAN-2000.
XX
PF   06-JUL-1998;   98JP-00190001.
XX
PR   06-JUL-1998;   98JP-00190001.
XX
PA   (SUME ) SUMITOMO ELECTRIC IND CO.
XX
DR   WPI; 2000-154339/14.
XX
PT   A DNA coding a protein inhibiting the expression of fibronectin gene -
PT   used for research of expression inhibition of fibronectin related to cell
PT   growth, cancer and cell ageing.
XX
PS   Disclosure; Fig 8; 21pp; Japanese.
XX
CC   This sequence represents a fibronectin inhibitor oligonucleotide. The
CC   invention relates to a fibronectin inhibitor protein GBP-1. The GBP-1
CC   protein inhibits the expression of the fibronectin gene. The protein
CC   sequence can be used to produce antibodies against the GBP-1 protein. The
CC   GBP-1 DNA, protein and antibody sequences can be used for the research of
CC   expression inhibition of fibronectin in relation to cell growth, cancer
CC   and cell aging
XX
SQ   Sequence 24 BP; 3 A; 4 C; 14 G; 3 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2928 CGTGGGGGGGCGTGGAGGGA 2947
              ||||||||||||  | |||||
Db          3 CGTGGGGGGGCGGGAAGGGA 22


RESULT 846
AAL47757
ID   AAL47757 standard; DNA; 24 BP.
XX
AC   AAL47757;
XX
DT   18-SEP-2002  (first entry)
XX
DE   Ras gene PCR primer SEQ ID NO: 53.
XX
KW   K-ras; N-ras; H-ras; ras; oncogene; mutation detection; PCR; primer;
KW   probe; restriction mediated selection PCR; cancer; ss.
XX
OS   Unidentified.
XX
PN   WO200229005-A2.
XX
PD   11-APR-2002.
XX
PF   02-OCT-2001; 2001WO-US042422.
XX
PR   02-OCT-2000; 2000US-0237416P.
XX
PA   (ORTH ) ORTHO CLINICAL DIAGNOSTICS INC.
XX
PI   Belly RT,  Todd AV,  Fuery CJ;
XX
DR   WPI; 2002-479599/51.
XX
PT   Amplifying and determining mutant sequences in DNA sample using
PT   thermostable restriction enzyme so that during thermocycling mutant
PT   sequences are enriched while wild-type sequences and/or primer induced
PT   sites are cleaved.
XX
PS   Claim 1; Page 84; 116pp; English.
XX
CC   The present invention relates to a method of amplifying and determining
CC   target mutant Ras sequences in a DNA sample, involving the use of a
CC   thermostable restriction enzyme and primers shown in AAL47705-AAL47771.
CC   The method used is designated restriction mediated selection polymerase
CC   chain reaction (REMS-PCR). The method can be used to detect H-ras, K-ras
```

```
CC   and N-ras mutations, which may lead to cancer. The present sequence is a
CC   PCR primer useful in the method of the invention
XX
SQ   Sequence 24 BP; 3 A; 6 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        834 GCTGGTGGTGCTGCCAGCCG 853
              ||||||||||| |||| ||||
Db          5 GCTGGTGGTGGTGCCCGCCG 24


RESULT 847
ADQ30147/c
ID   ADQ30147 standard; DNA; 24 BP.
XX
AC   ADQ30147;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Murine VR1 exon 1d transcription factor binding fragment #39.
XX
KW   ds; VR1 receptor; vanilloid receptor type 1; modulator;
KW   pain transmission; primary sensory neuron; transcription factor;
KW   detection; MZF1; NFkappaB; NFAT; GATA1; sensitivity disorder; analgesia;
KW   hypalgesia; hyperalgesia; neuralgia; myalgia; murine.
XX
OS   Mus sp.
XX
PN   WO2004053120-A2.
XX
PD   24-JUN-2004.
XX
PF   01-DEC-2003; 2003WO-EP013522.
XX
PR   09-DEC-2002; 2002DE-01057421.
XX
PA   (CHEF ) GRUENENTHAL GMBH.
XX
PI   Weihe E,  Bieller A,  Schaefer MKH;
XX
DR   WPI; 2004-468868/44.
XX
PT   New nucleic acid that modulates expression of the vanilloid receptor-1,
PT   useful for control of pain or sensitivity disorders, comprises sequences
PT   from control regions of the receptor gene.
XX
PS   Disclosure; Page 49; 68pp; German.
XX
CC   This invention describes a novel nucleic acid containing a specific
CC   segment having at least one region that modulates expression of the VR1
CC   (vanilloid receptor type 1) receptor, or a functional derivative, allele
CC   or fragment of this region, or a sequence that hybridises to it under
CC   standard conditions. The VR1 modulator is derived from one or more of
CC   positions 221931-223344 of GenBank AL670399, 31673-36359 of AL663116, or
CC   44731-43231 or 36616-33151 of AF168787 and is involved in transmission of
CC   pain, particularly in primary sensory neurons. The invention also
CC   describes a vector that contains the VR1 modulator, host cells containing
CC   this vector (other than human germ or embryonal stem cells) and a method
CC   for modulating expression of the VR1 receptor by introducing the
CC   modulator or the vector into a cell that contains the VR1 gene. The
CC   products of the invention are used for detecting a transcription factor
CC   from its binding to a regulatory sequence (or a double-stranded
CC   oligonucleotide fragment of it), e.g. by Western blotting or enzyme-
CC   linked immunosorbant assay, particularly for diagnosis of diseases
CC   associated with overexpression or underexpression of the transcription
CC   factor. The region that modulates VR1 receptor expression includes a
CC   binding site for a transcription factor, e.g. MZF1, NFkappaB, NFAT or
CC   GATA1. The nucleic acids of the invention, or vectors containing them,
CC   are used for prevention or treatment of pain, also for treating
CC   sensitivity disorders, e.g. analgesia, hypalgesia or hyperalgesia, also
CC   neuralgia and myalgia, that are associated with activity of the VR1
CC   receptor. This sequence represents a fragment of murine VR1 exon 1d DNA
CC   which is capable of binding to a transcription factor.
XX
SQ   Sequence 24 BP; 13 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 24;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3299 TTTCTATAGGATTTTTCTTT 3318
              ||||| |||||||||| |||
Db         21 TTTCTCTAGGATTTTTGTTT 2


RESULT 848
AAF74922/c
ID   AAF74922 standard; DNA; 29 BP.
XX
AC   AAF74922;
XX
DT   23-MAY-2001  (first entry)
XX
DE   CD40L poly-A tract sequence SEQ ID NO:19.
XX
KW   Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
KW   diagnosis; antiarthritic; antirheumatic; immunosuppressive;
KW   antiinflammatory; inflammatory disease; autoimmune disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200119844-A1.
XX
PD   22-MAR-2001.
XX
PF   13-SEP-2000; 2000WO-US024966.
XX
PR   13-SEP-1999;   99US-0153625P.
XX
PA   (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
PI   Crow MK,  Li Y;
XX
DR   WPI; 2001-244776/25.
XX
PT   New altered CD40L promoter for use in the study, diagnosis and treatment
PT   of a variety of inflammatory disorders and autoimmune diseases, such as
PT   rheumatoid arthritis.
XX
PS   Example 1; Fig 3; 90pp; English.
XX
CC   The present invention describes an isolated, purified nucleic acid, which
CC   is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
CC   residues 331-455 of the sequence comprising 455 nucleotides given in
CC   AAF74905 where A in the wild type sequence at position 331 (corresponding
CC   to position -125) is replaced with C. (I) has antiarthritic,
CC   antirheumatic, immunosuppressive and antiinflammatory activities, and can
CC   be used in gene therapy. (I) is useful in the study, diagnosis and
CC   treatment of inflammatory and autoimmune diseases, as well as diseases in
CC   which elevated expression of CD40L is a factor, e.g., rheumatoid
CC   arthritis. The present sequence represents a CD40L poly-A tract sequence
CC   which is used in an example from the present invention
XX
SQ   Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 29;
  Best Local Similarity   75.0%;  Pred. No. 1.5e+03;
  Matches   21;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy       3258 AAGATATTTTATTTGCTTTGTCCTTTTT 3285
              ||| | |||| |||| ||| |  |||||
Db         28 AAGGTTTTTTGTTTGTTTTTTTTTTTTT 1
```

RESULT 849
AAD27121/c
ID AAD27121 standard; RNA; 36 BP.
XX
AC AAD27121;
XX
DT 09-APR-2002 (first entry)
XX
DE RNA template, (AU)4 used to direct RNA synthesis by HCV RNA polymerase.
XX
KW Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
KW lead compound; RNA polymerase; ss.
XX
OS Unidentified.
XX
PN US6322966-B1.
XX
PD 27-NOV-2001.
XX
PF 11-MAY-1999; 99US-00309670.
XX
PR 11-MAY-1999; 99US-00309670.
XX
PA (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (LAUJ/) LAU J Y N.
XX
PI Zhong W, Hong Z, Lau JYN;
XX
DR WPI; 2002-096587/13.
XX
PT Assay system for hepatitis C virus replicase activity comprises RNA
PT template with unstable, small stemloop capable of forming copy-back
PT structure, viral non-structural protein 5B, nucleoside triphosphates,
PT buffer.
XX
PS Example 1; Fig 1C; 10pp; English.
XX
CC The present invention relates to an assay system for hepatitis C virus
CC (HCV) replicase activity. The assay system comprises an RNA template that
CC has an unstable, small stemloop at the 3' end capable of forming a copy-
CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
CC radiolabelled and an assay buffer that supports replication activity of
CC NS5B. The invention also relates to the identification of optimal
CC properties of an RNA template for copy-back self-priming RNA synthesis of
CC HCV. This activity can be used to screen for anti-HCV replicase compounds
CC or to characterise the biological relevance of lead compounds. The
CC optimal RNA templates can be used for developing a system to characterise
CC HCV NS5B polymerase mechanistically and kinetically and for designing
CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
CC system of the invention is useful for detecting HCV replicase activity.
CC The nucleic acid synthesised by NS5B is detected by evaluating an
CC autoradiograph of reaction products separated by gel electrophoresis. The
CC present sequence is RNA template, (AU)4 used to direct RNA synthesis by
CC RNA polymerase proteins of HCV, BVDV and polivirus. This sequence is used
CC in the exemplification of the invention
XX
SQ Sequence 36 BP; 30 A; 0 C; 2 G; 0 T; 4 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 36;
Best Local Similarity 66.7%; Pred. No. 1.8e+03;
Matches 24; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

Qy 3464 ATATATATCTATATATATAATTTATTGAGTTTTTAC 3499
||||||| | | | | | ||| || ||||| |
Db 36 ATATATATTTTTTTTTTTTTTTTTTTTTTTTTCC 1

RESULT 850
ABK99274/c
ID ABK99274 standard; RNA; 36 BP.
XX
AC ABK99274;
XX
DT 21-OCT-2002 (first entry)
XX
DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #4.
XX
KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
OS Synthetic.
XX
PN US2002064771-A1.
XX
PD 30-MAY-2002.
XX
PF 06-APR-2001; 2001US-00828034.
XX
PR 07-APR-2000; 2000US-0195852P.
XX
PA (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (FERR/) FERRARI E.
XX
PI Zhong W, Hong Z, Ferrari E;
XX
DR WPI; 2002-582330/62.
XX
PT Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
PT and template and primer which do not form a stable duplex in the absence
PT of HCV NS5B.
XX
PS Example; Page 6; 17pp; English.
XX
CC The invention relates to a replicase complex comprising a hepatitis C
CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
CC complementary nucleic acid primer which is annealed to the 3' terminus of
CC the template, where the template is at least three nucleotides and the
CC primer is two or three nucleotides, and the template and primer do not
CC form a stable duplex in solution in the absence of the HCV NS5B protein.
CC The complex is useful for detecting HCV replicase activity and permits
CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
CC and evaluate antiviral inhibitors and to improve the specificity and
CC efficacy of the inhibitors. The complex is also useful in the development
CC of a reliable system for determining kinetic and thermodynamic constants
CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
CC mechanistic inhibitors for mis-incorporation or chain termination.
CC Specifically, the short RNA template and primer pairs are useful in
CC screening assays which are used for determining kinetic, thermodynamic
CC and mechanistic properties of NS5B replication and ultimately in the
CC development of inhibitors of NS5B. Newly identified inhibitors of
CC replicase activity may be used for developing anti-HCV pharmaceuticals.
CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
CC templates
XX
SQ Sequence 36 BP; 29 A; 0 C; 2 G; 0 T; 5 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 36;
Best Local Similarity 66.7%; Pred. No. 1.8e+03;
Matches 24; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

Qy 3464 ATATATATCTATATATATAATTTATTGAGTTTTTAC 3499
||||||| | | | | | ||| || ||||| |
Db 36 ATATATATTTTTTTTTTTTTTTTTTTTTTTTTCC 1

RESULT 851
AAD27118/c
ID AAD27118 standard; RNA; 36 BP.
XX
AC AAD27118;
XX
DT 09-APR-2002 (first entry)

```
XX
DE   RNA template, (AU)5 used to direct RNA synthesis by HCV RNA polymerase.
XX
KW   Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
KW   lead compound; RNA polymerase; ss.
XX
OS   Unidentified.
XX
PN   US6322966-B1.
XX
PD   27-NOV-2001.
XX
PF   11-MAY-1999;   99US-00309670.
XX
PR   11-MAY-1999;   99US-00309670.
XX
PA   (ZHON/) ZHONG W.
PA   (HONG/) HONG Z.
PA   (LAUJ/) LAU J Y N.
XX
PI   Zhong W,  Hong Z,  Lau JYN;
XX
DR   WPI; 2002-096587/13.
XX
PT   Assay system for hepatitis C virus replicase activity comprises RNA
PT   template with unstable, small stemloop capable of forming copy-back
PT   structure, viral non-structural protein 5B, nucleoside triphosphates,
PT   buffer.
XX
PS   Example 1; Fig 1A; 10pp; English.
XX
CC   The present invention relates to an assay system for hepatitis C virus
CC   (HCV) replicase activity. The assay system comprises an RNA template that
CC   has an unstable, small stemloop at the 3' end capable of forming a copy-
CC   back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
CC   and UTP nucleoside triphosphates (NTPs), where one of the NTP is
CC   radiolabelled and an assay buffer that supports replication activity of
CC   NS5B. The invention also relates to the identification of optimal
CC   properties of an RNA template for copy-back self-priming RNA synthesis of
CC   HCV. This activity can be used to screen for anti-HCV replicase compounds
CC   or to characterise the biological relevance of lead compounds. The
CC   optimal RNA templates can be used for developing a system to characterise
CC   HCV NS5B polymerase mechanistically and kinetically and for designing
CC   small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
CC   system of the invention is useful for detecting HCV replicase activity.
CC   The nucleic acid synthesised by NS5B is detected by evaluating an
CC   autoradiograph of reaction products separated by gel electrophoresis. The
CC   present sequence is RNA template, (AU)5 used to direct RNA synthesis by
CC   RNA polymerase proteins of HCV, BVDV and polivirus. This sequence is used
CC   in the exemplification of the invention
XX
SQ   Sequence 36 BP; 29 A; 0 C; 2 G; 0 T; 5 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 36;
  Best Local Similarity   66.7%;  Pred. No. 1.8e+03;
  Matches   24;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy       3464 ATATATATCTATATATATAATTTATTGAGTTTTTAC 3499
              |||||||| | | | | |  ||| ||   ||||| |
Db         36 ATATATATATTTTTTTTTTTTTTTTTTTTTTTTCC 1


RESULT 852
ADD69518
ID   ADD69518 standard; DNA; 17 BP.
XX
AC   ADD69518;
XX
DT   15-JAN-2004  (first entry)
XX
DE   ISSR-related PCR primer 5.
XX
KW   inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
KW   animal; Basmati rice; ss.
XX
OS   Unidentified.
XX
PN   WO2003085133-A2.
XX
PD   16-OCT-2003.
XX
PF   09-JAN-2003; 2003WO-IB000041.
XX
PR   08-APR-2002; 2002IN-CH000260.
XX
PA   (DNAF-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX
PI   Nagaraju JG;
XX
DR   WPI; 2003-804317/75.
XX
PT   New set of inter-simple sequence repeats (ISSR)-PCR primers for
PT   genotyping eukaryotes, useful for genotyping diverse genomes of plant and
PT   animal systems.
XX
PS   Disclosure; Page 19; 60pp; English.
XX
CC   The invention relates to a novel set of inter-simple sequence repeats
CC   (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
CC   invention may be useful for genotyping diverse genomes of plant and
CC   animal systems, in particular for distinguishing Basmati rice varieties
CC   from non-Basmati rice varieties and traditional Basmati rice varieties
CC   from evolved Basmati rice varieties. The current sequence is that of the
CC   ISSR-related PCR primer of the invention.
XX
SQ   Sequence 17 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.6;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 8.9e+02;
  Matches   16;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2335 GTGTGTGTGTGTGTGTG 2351
              |||||||||||||||||:
Db          1 GTGTGTGTGTGTGTGTR 17


RESULT 853
AAX10119
ID   AAX10119 standard; DNA; 23 BP.
XX
AC   AAX10119;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker downstream primer #425.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
```

DR WPI; 1998-286974/25.
XX
PT New isolated nucleic acid segments from the human genome - used for
PT determining polymorphic forms for use in e.g. forensics, paternity
PT testing or phenotypic typing for disease.
XX
PS Claim 16; Page 202; 310pp; English.
XX
CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC isolation of various biallelic polymorphic markers found in the human
CC genome (represented in AAX10269-X12937). These primers can be used in a
CC method for determining polymorphic forms in an individual for use in e.g.
CC forensics, paternity testing or for phenotypic typing for diseases such
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC hypercholesterolemia, polycystic kidney disease, hereditary
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC autoimmune diseases, inflammation, cancer, diseases of the nervous
CC system, infection by pathogenic microorganisms, and characteristics such
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC endurance, fertility, and susceptibility or receptivity to particular
CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC segments can also be used to produce medicaments for the treatment or
CC prophylaxis of such diseases
XX
SQ Sequence 23 BP; 8 A; 1 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 1.2e+03;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1354 GAGATGATGAAGATGATCGGGAA 1376
|||||| |||| ||| || ||||
Db 1 GAGATGTTGAAAATGTTCTGGAA 23

RESULT 854
AAZ00748/c
ID AAZ00748 standard; DNA; 23 BP.
XX
AC AAZ00748;
XX
DT 07-OCT-1999 (first entry)
XX
DE Human FGFR-4 transmembrane domain PCR primer #2.
XX
KW FGFR-4; transmembrane domain; human; fibroblast growth factor receptor;
KW overexpression; cytostatic; receptor tyrosine kinase inhibitor; cancer;
KW kinase inactive; treatment; prophylaxis; tyrosine kinase-related;
KW hyperproliferation; invasion; disease; carcinoma; metastasis; detection;
KW breast cancer; squamous cell carcinoma; glioblastoma; neuroblastoma;
KW uterine cancer; diagnosis; screening assay; predisposition; mutant;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9937299-A1.
XX
PD 29-JUL-1999.
XX
PF 22-JAN-1999; 99WO-EP000405.
XX
PR 22-JAN-1998; 98DE-01002377.
XX
PA (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
PI Ullrich A, Bange J, Knyazev P;
XX
DR WPI; 1999-478980/40.
XX
PT A mutated fibroblast growth factor receptor 4 overexpressed or having
PT altered activity, useful in diagnosis of cancer cells.
XX
PS Example; Page 16; 51pp; German.
XX
CC This invention describes a novel mutated fibroblast growth factor
CC receptor (FGFR)-4, that causes overexpression and/or altered activity of
CC the receptor in cells and has cytostatic activity. The product of the
CC invention is a receptor tyrosine kinase inhibitor. A receptor tyrosine
CC kinase inhibitor, especially mutated FGFR-4 (kinase inactive) is useful
CC for treatment and/or prophylaxis of over functional receptor tyrosine
CC kinase-related conditions, especially cancer. The inhibitor can also be
CC used to treat cancer and/or hyperproliferation and/or invasion that leads
CC back to disease, particularly carcinoma, particularly through inhibition
CC of metastasis. The inhibitor is used to treat breast cancer, squamous
CC cell carcinoma, glioblastoma, neuroblastoma and/or uterine cancer.
CC Detection of a mutated FGFR-4 or a sequence encoding it, can be used in
CC differential diagnosis of cancer, or in a screening assay to determine a
CC predisposition to developing cancer. This sequence represents a PCR
CC primer used to amplify the FGRF-4 fragment used in the method of the
CC invention
XX
SQ Sequence 23 BP; 7 A; 2 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 1.2e+03;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1009 CACAAGATCTCCCGCTTCCCGCT 1031
|| ||| |||||| |||||| ||
Db 23 CAGAAGCTCTCCCTCTTCCCTCT 1

RESULT 855
AAZ00750/c
ID AAZ00750 standard; DNA; 23 BP.
XX
AC AAZ00750;
XX
DT 07-OCT-1999 (first entry)
XX
DE Human FGFR-4 transmembrane domain PCR primer #4.
XX
KW FGFR-4; transmembrane domain; human; fibroblast growth factor receptor;
KW overexpression; cytostatic; receptor tyrosine kinase inhibitor; cancer;
KW kinase inactive; treatment; prophylaxis; tyrosine kinase-related;
KW hyperproliferation; invasion; disease; carcinoma; metastasis; detection;
KW breast cancer; squamous cell carcinoma; glioblastoma; neuroblastoma;
KW uterine cancer; diagnosis; screening assay; predisposition; mutant;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9937299-A1.
XX
PD 29-JUL-1999.
XX
PF 22-JAN-1999; 99WO-EP000405.
XX
PR 22-JAN-1998; 98DE-01002377.
XX
PA (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
PI Ullrich A, Bange J, Knyazev P;
XX
DR WPI; 1999-478980/40.
XX
PT A mutated fibroblast growth factor receptor 4 overexpressed or having
PT altered activity, useful in diagnosis of cancer cells.
XX
PS Example; Page 16; 51pp; German.
XX

```
CC   This invention describes a novel mutated fibroblast growth factor
CC   receptor (FGFR)-4, that causes overexpression and/or altered activity of
CC   the receptor in cells and has cytostatic activity. The product of the
CC   invention is a receptor tyrosine kinase inhibitor. A receptor tyrosine
CC   kinase inhibitor, especially mutated FGFR-4 (kinase inactive) is useful
CC   for treatment and/or prophylaxis of over functional receptor tyrosine
CC   kinase-related conditions, especially cancer. The inhibitor can also be
CC   used to treat cancer and/or hyperproliferation and/or invasion that leads
CC   back to disease, particularly carcinoma, particularly through inhibition
CC   of metastasis. The inhibitor is used to treat breast cancer, squamous
CC   cell carcinoma, glioblastoma, neuroblastoma and/or uterine cancer.
CC   Detection of a mutated FGFR-4 or a sequence encoding it, can be used in
CC   differential diagnosis of cancer, or in a screening assay to determine a
CC   predisposition to developing cancer. This sequence represents a PCR
CC   primer used to amplify the FGRF-4 fragment used in the method of the
CC   invention
XX
SQ   Sequence 23 BP; 7 A; 2 C; 11 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.6;  DB 1;  Length 23;
  Best Local Similarity   82.6%;  Pred. No. 1.2e+03;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       1009 CACAAGATCTCCCGCTTCCCGCT 1031
              || ||| |||||| |||||| ||
Db         23 CAGAAGCTCTCCCTCTTCCCTCT 1


RESULT 856
AAC83579/c
ID   AAC83579 standard; DNA; 23 BP.
XX
AC   AAC83579;
XX
DT   28-FEB-2001  (first entry)
XX
DE   Human FMR1 gene triplet repeat PCR primer NM-BS-for.
XX
KW   Human; FMR1; FMRP; Fragile X syndrome; methylation; diagnosis;
KW   chromosome Xq27.3; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   US6143504-A.
XX
PD   07-NOV-2000.
XX
PF   27-OCT-1999;   99US-00429499.
XX
PR   27-OCT-1999;   99US-00429499.
XX
PA   (ARCH-) ARCH DEV CORP.
XX
PI   Das S,  Ledbetter DH;
XX
DR   WPI; 2001-006432/01.
XX
PT   Determining methylation state of FMR1 gene promoter for diagnosing
PT   fragile X syndrome in males involves denaturing DNA sample, subjecting
PT   DNA to bisulfite modification, amplifying DNA and detecting products.
XX
PS   Claim 17; Col 31; 20pp; English.
XX
CC   The present invention describes a novel method of diagnosing Fragile X
CC   syndrome using a PCR-based method of methylation analysis. The FMR1 gene
CC   promoter, located at chromosome Xq27.3, is composed of a CGG
CC   trinucleotide repeat. The expansion of this repeat leads to a premutation
CC   and then a full mutation, the latter of which is likely to cause the
CC   methylation of a nearby CpG island, causing the Fragile X syndrome
CC   phenotype. This method is useful in the design of appropriate therapies
CC   and counselling for affected individuals and carriers
XX
SQ   Sequence 23 BP; 11 A; 10 C; 0 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.6;  DB 1;  Length 23;
  Best Local Similarity   82.6%;  Pred. No. 1.2e+03;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2328 TGTGTGCGTGTGTGTGTGTGTGT 2350
              | || | |||||||| |||||||
Db         23 TTTGGGAGTGTGTGTATGTGTGT 1


RESULT 857
AAL48953/c
ID   AAL48953 standard; DNA; 23 BP.
XX
AC   AAL48953;
XX
DT   24-OCT-2002  (first entry)
XX
DE   Hepatitis C virus E1 protein coding sequence PCR primer OVR3.
XX
KW   Hepatitis C virus; HCV; E1 protein; E2 protein; infection; primer; PCR;
KW   virucide; immunostimulant; vaccine; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200255548-A2.
XX
PD   18-JUL-2002.
XX
PF   11-JAN-2002; 2002WO-EP000219.
XX
PR   11-JAN-2001; 2001US-0260669P.
PR   30-AUG-2001; 2001US-0315768P.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   Maertens G,  Bosman F,  Buyse M;
XX
DR   WPI; 2002-599657/64.
XX
PT   New therapeutic vaccine compositions comprising at least one purified
PT   recombinant hepatitis C virus (HCV) single or specific oligomeric
PT   recombinant envelope protein E1 or E2, useful for immunizing humans from
PT   HCV infection.
XX
PS   Example 8; Page 236; 243pp; English.
XX
CC   The present invention relates to new therapeutic vaccine compositions for
CC   inducing hepatitis C virus (HCV)-specific antibodies, comprising a
CC   composition containing at least one purified recombinant HCV single or
CC   specific oligomeric recombinant envelope proteins selected from an E1 and
CC   an E2 protein, and optionally a pharmaceutical adjuvant. The vaccines are
CC   useful for inducing HCV-specific antibodies or for immunising humans
CC   against HCV. The recombinant HCV E1 and/or E2 proteins are useful as
CC   vaccines or therapeutics, in HCV screening and confirmatory antibody
CC   tests, for raising antibodies, in the preparation of medicament, and for
CC   in vitro monitoring of HCV disease or prognosing the response to
CC   treatment of patients suffering from HCV infection. The present sequence
CC   is a PCR primer used in the production of vectors in the exemplification
CC   of the invention
XX
SQ   Sequence 23 BP; 2 A; 8 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.6;  DB 1;  Length 23;
  Best Local Similarity   82.6%;  Pred. No. 1.2e+03;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2164 GCCCCACCCAGCAGTGGGGGCTC 2186
              || | |||||||||| ||| ||||
Db         23 GCGCTACCCAGCAGCGGGAGCTC 1


RESULT 858
```

ADD69476/c
ID ADD69476 standard; DNA; 23 BP.
XX
AC ADD69476;
XX
DT 15-JAN-2004 (first entry)
XX
DE 3' anchored (ISSR)-PCR primer - SEQ ID 34.
XX
KW inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
KW animal; Basmati rice; ss.
XX
OS Synthetic.
XX
PN WO2003085133-A2.
XX
PD 16-OCT-2003.
XX
PF 09-JAN-2003; 2003WO-IB000041.
XX
PR 08-APR-2002; 2002IN-CH000260.
XX
PA (DNAF-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX
PI Nagaraju JG;
XX
DR WPI; 2003-804317/75.
XX
PT New set of inter-simple sequence repeats (ISSR)-PCR primers for
PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and
PT animal systems.
XX
PS Claim 1; SEQ ID NO 34; 60pp; English.
XX
CC The invention relates to a novel set of inter-simple sequence repeats
CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
CC invention may be useful for genotyping diverse genomes of plant and
CC animal systems, in particular for distinguishing Basmati rice varieties
CC from non-Basmati rice varieties and traditional Basmati rice varieties
CC from evolved Basmati rice varieties. The current sequence is that of the
CC 3' anchored (ISSR)-PCR primer of the invention.
XX
SQ Sequence 23 BP; 10 A; 10 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 1.2e+03;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2309 GCTTTGGTCTGTGTGTGTGTGTG 2331
||| || ||||||||||||||
Db 23 GCTGTGCATTGTGTGTGTGTGTG 1

RESULT 859
ADD55614/c
ID ADD55614 standard; DNA; 23 BP.
XX
AC ADD55614;
XX
DT 15-JAN-2004 (first entry)
XX
DE Hepatitis C virus E1/E2 protein-related PCR primer #11.
XX
KW Hepatitis C virus; HCV; vaccine; liver disease; E1 protein; E2 protein;
KW liver fibrosis; ss; PCR; primer.
XX
OS Hepatitis C virus.
XX
PN WO2003051912-A2.
XX
PD 26-JUN-2003.
XX
PF 18-DEC-2002; 2002WO-EP014480.
XX
PR 18-DEC-2001; 2001US-00020510.
PR 16-OCT-2002; 2002US-0418358P.
XX
PA (INNO-) INNOGENETICS NV.
XX
PI Maertens G, Depla E, Bosman F;
XX
DR WPI; 2003-541632/51.
XX
PT New hepatitis C virus (HCV) vaccine composition, useful for reducing
PT liver disease, e.g., liver fibrosis in a chronic HCV-infected mammal.
XX
PS Example 11; SEQ ID NO 106; 271pp; English.
XX
CC The invention comprises an Hepatitis C virus (HCV) vaccine for reducing
CC liver disease. The vaccine of the invention comprises an HCV E1 or E2
CC protein as an antigen. The HCV vaccine is useful for reducing liver
CC disease (e.g. liver fibrosis) in a chronic HCV-infected mammal. The
CC present DNA sequence represents a PCR primer that was used in the
CC exemplification of the invention.
XX
SQ Sequence 23 BP; 2 A; 8 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 1.2e+03;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2164 GCCCCACCCAGCAGTGGGGGCTC 2186
|| | ||||||||| ||| ||||
Db 23 GCGCTACCCAGCAGCGGGAGCTC 1

RESULT 860
ADN35526
ID ADN35526 standard; DNA; 23 BP.
XX
AC ADN35526;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human NSCLC gene semi-quantitative PCR primer forward primer #103.
XX
KW ss; primer; cytostatic; gene therapy; vaccine;
KW non-small cell lung cancer; NSCLC; diagnosis; cancer; URLC1.
XX
OS Homo sapiens.
XX
PN WO2004031413-A2.
XX
PD 15-APR-2004.
XX
PF 22-SEP-2003; 2003WO-JP012072.
XX
PR 30-SEP-2002; 2002US-0414673P.
PR 28-FEB-2003; 2003US-0451374P.
PR 28-APR-2003; 2003US-0466100P.
XX
PA (ONCO-) ONCOTHERAPY SCI INC.
PA (UYTY) UNIV TOKYO.
XX
PI Nakamura Y, Daigo Y, Nakatsuru S;
XX
DR WPI; 2004-330206/30.
XX
PT Diagnosing, preventing and treating non-small cell lung cancer (NSCLC)
PT comprises determining an expression level of an NSCLC-associated gene in
PT a sample.
XX
PS Disclosure; SEQ ID NO 207; 394pp; English.
XX
CC The invention relates to a method of diagnosing non-small cell lung
CC cancer (NSCLC) or a predisposition to developing NSCLC in a subject by

```
CC   determining the expression level of a NSCLC-associated gene in a
CC   biological sample derived from the subject, where an increase or decrease
CC   of the level compared to a normal control level of the gene indicates
CC   that the subject suffers from or is at risk of developing NSCLC. The
CC   method is useful in diagnosing NSCLC or a predisposition to developing
CC   NSCLC in a subject. The compound, polynucleotide and the encoded
CC   polypeptide and composition are useful in treating or preventing NSCLC.
CC   This sequence corresponds to a primer for semi-quantitative PCR
CC   amplification of genes that are differentially expressed in NSCLC cells.
XX
SQ   Sequence 23 BP; 6 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.6;  DB 1;  Length 23;
  Best Local Similarity   82.6%;  Pred. No. 1.2e+03;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2972 AGCAGAGGACCAGGGCTTTTTCT 2994
              ||||||||| ||| ||||| | |
Db          1 AGCAGAGGATCAGAGCTTTCTTT 23


RESULT 861
ADP71196/c
ID   ADP71196 standard; DNA; 23 BP.
XX
AC   ADP71196;
XX
DT   23-SEP-2004  (first entry)
XX
DE   HCV E1 HCC110A glycosylation site 3 mutagenic primer OVR 3.
XX
KW   Hepatitis C virus; HCV; E1 glycoprotein; E2 glycoprotein; HCV infection;
KW   liver disease; liver fibrosis; ss; serum alanine aminotransferase level;
KW   steatosis; anti-E2 immunoreactivity; PCR; primer.
XX
OS   Hepatitis C virus.
OS   Synthetic.
XX
PN   US2004126395-A1.
XX
PD   01-JUL-2004.
XX
PF   18-DEC-2002; 2002US-00321798.
XX
PR   18-DEC-2001; 2001US-0453708P.
PR   16-OCT-2002; 2002US-0418358P.
XX
PA   (MAER/) MAERTENS G.
PA   (DEPL/) DEPLA E.
PA   (BOSM/) BOSMAN F.
XX
PI   Maertens G,  Depla E,  Bosman F;
XX
DR   WPI; 2004-499089/47.
XX
PT   Use of hepatitis C virus (HCV) vaccine composition for reducing liver
PT   disease, serum alanine aminotransferase levels, steatosis, or anti-E2
PT   immunoreactivity in the liver of a chronic HCV-infected mammal.
XX
PS   Example 8; SEQ ID NO 106; 176pp; English.
XX
CC   The invention relates to the use of a hepatitis C virus (HCV) vaccine
CC   composition for reducing liver disease (such as liver fibrosis or its
CC   progression), serum alanine aminotransferase (ALT) levels, steatosis, or
CC   anti-E2 immunoreactivity in the liver of a chronic HCV-infected mammal,
CC   or for treating a chronic HCV-infected mammal. The liver disease is
CC   reduced by at least 1-2 points according to the overall Ishak score in
CC   the HCV-infected mammal. Also included are a method for predicting
CC   changes in liver disease in a chronic HCV-infected mammal, a therapeutic
CC   HCV vaccine composition (comprising at least one purified or a
CC   combination of at least 2 HCV single or specific oligomeric recombinant
CC   envelope protein selected from an E1 or E2 protein, a part of E1 and E2
CC   proteins, an E1/E2 protein complex formed from purified HCV single or
CC   specific oligomeric recombinant E1 or E2 proteins or its parts and
CC   optionally a pharmaceutical adjuvant), a composition (comprising at least
CC   one E1 or E2 peptide, and optionally, a pharmaceutical adjuvant), an
CC   immunogenic HCV composition (or HCV vaccine composition) comprising a
CC   recombinant virus allowing expression of at least one HCV recombinant
CC   envelope protein (selected from an E1 protein and/or an E2 protein, and
CC   their parts, and optionally, a pharmaceutical adjuvant) and an HCV
CC   vaccine composition (comprising a recombinant virus allowing expression
CC   of at least one HCV recombinant envelope protein chosen from an E1
CC   protein and/or an E2 protein, and parts of the E1 and E2 proteins and,
CC   optionally, a pharmaceutical adjuvant. The HCV vaccine composition is
CC   useful for reducing liver disease (such as liver fibrosis or its
CC   progression), serum ALT levels, steatosis, or anti-E2 immunoreactivity in
CC   the liver in a chronic HCV-infected mammal, or for treating a chronic HCV
CC   -infected mammal, particularly human. The HCV E1 proteins are useful for
CC   in vitro monitoring HCV disease or prognosing the response to treatment
CC   of patients suffering from HCV infection. The present sequence is a PCR
CC   primer used in the production of Glycosylation site-deleted mutants of
CC   the HCV E1 protein.
XX
SQ   Sequence 23 BP; 2 A; 8 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.6;  DB 1;  Length 23;
  Best Local Similarity   82.6%;  Pred. No. 1.2e+03;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2164 GCCCCACCCAGCAGTGGGGGCTC 2186
              || | ||||||||| ||| ||||
Db         23 GCGCTACCCAGCAGCGGGAGCTC 1


RESULT 862
AAL45613/c
ID   AAL45613 standard; DNA; 24 BP.
XX
AC   AAL45613;
XX
DT   21-JUN-2002  (first entry)
XX
DE   ATP dependent membrane conjugated zinc proteinase 10-45 PCR primer #2.
XX
KW   Human; ATP dependent membrane conjugated zinc proteinase 10.45; enzyme;
KW   development disturbance; lipid metabolism disease; gene therapy; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   CN1327066-A.
XX
PD   19-DEC-2001.
XX
PF   05-JUN-2000; 2000CN-00116334.
XX
PR   05-JUN-2000; 2000CN-00116334.
XX
PA   (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI   Mao Y,  Xie Y;
XX
DR   WPI; 2002-206994/27.
XX
PT   New polypeptide-human ATP dependent membrane conjugated zinc proteinase
PT   10.45 and polynucleotide for encoding such polypeptide.
XX
PS   Example 2; Page 17(Disclosure); 34pp; Chinese.
XX
CC   The present invention provides the protein and coding sequences of human
CC   ATP dependent membrane conjugated zinc proteinase 10.45. The sequences
CC   can be used in the treatment of developmental disturbances and lipid
CC   metabolism disease. The present sequence is a PCR primer for the coding
CC   sequence of the invention
XX
SQ   Sequence 24 BP; 9 A; 3 C; 1 G; 11 T; 0 U; 0 Other;
```

```
  Query Match             0.4%;  Score 16.6;  DB 1;  Length 24;
  Best Local Similarity   82.6%;  Pred. No. 1.3e+03;
  Matches   19;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2824 ATATATACATATATATATATAAC 2846
              ||||||| | |||| ||||| ||
Db         24 ATATATATAAATATGTATATGAC 2
```

RESULT 863
AAQ33786
ID AAQ33786 standard; DNA; 18 BP.
XX
AC AAQ33786;
XX
DT 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
DE Microsatellite sequence from clone TGLA189.
XX
KW PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW genetic mapping; traits; amplification; ss.
XX
OS Bos taurus.
XX
PN WO9213102-A1.
XX
PD 06-AUG-1992.
XX
PF 15-JAN-1992; 92WO-US000340.
XX
PR 15-JAN-1991; 91US-00642342.
XX
PA (GENM-) GENMARK.
XX
PI Georges M, Massey JM;
XX
DR WPI; 1992-284684/34.
XX
PT Polymorphic bovine DNA markers - used in genetic identification, gene
PT mapping, and selective breeding.
XX
PS Table 7; Page 244; 517pp; English.
XX
CC The sequence is that of a bovine microsatellite sequence obtd. by
CC screening a library of bovine MboI DNA fragments of between 250 and 500
CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC clones cross-hybridised. Assuming independent distribution of
CC microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC in the bovine genome is estimated at >100, 000. The sequence information
CC for ca. 230 such bovine microsatellites is summarised in the
CC specification and indexed herein (see below). The sequences upstream and
CC downstream of the microsatellite sequence were used to generate the
CC required PCR primers for in vitro amplification of the corresp.
CC microsatellite (using the program OPTIPRIM). The microsatellites may be
CC used to identify individuals, for parentage testing, and in the genetic
CC mapping of economic trait loci, or genes involved the determinism of
CC economically important traits esp. in cattle, to allow selective
CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 18 BP; 1 A; 0 C; 9 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2325 GTGTGTGTGCGTGTGTGT 2342
              ||||||||| ||||||||
Db          1 GTGTGTGTGAGTGTGTGT 18
```

RESULT 864
AAV21967
ID AAV21967 standard; DNA; 18 BP.
XX
AC AAV21967;
XX
DT 14-JUL-1998 (first entry)
XX
DE Nuclease resistant antisense oligo NBT 140 targeted against (AT)9.
XX
KW Nuclease resistant; bacterial infection; antibiotic; target;
KW veterinary medicine; treatment; human; industrial process;
KW bacterial control; ss.
XX
OS Synthetic.
XX
PN WO9803533-A1.
XX
PD 29-JAN-1998.
XX
PF 23-JUL-1997; 97WO-US012961.
XX
PR 24-JUL-1996; 96US-00685575.
XX
PA (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
XX
PI Arrow A, Dale RMK, Thompson TL;
XX
DR WPI; 1998-120687/11.
XX
PT Treating bacterial infections in humans or animals with
PT oligo:nucleotide(s) - resistant to nuclease and targetted to bacterial
PT nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
PT with antibiotics.
XX
PS Claim 49; Page 87; 163pp; English.
XX
CC This antisense oligonucleotide is nuclease resistant and can be used in
CC the treatment of animals, including humans, having a bacterial infection.
CC The treatment comprises administration of such nuclease resistant
CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
CC and formulated with a carrier. A compound comprising this nuclease
CC resistant oligonucleotide can be covalently linked to an antibiotic. The
CC method is used to treat infections by a wide variety of Gram-positive and
CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
CC The methods are particularly used in immuno-compromised individuals (e.g.
CC patients with acquired immunodeficiency syndrome or those receiving
CC chemotherapy or radiation therapy), optionally in combination with, or
CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
CC therapeutic use, the oligonucleotides can be used to control bacteria in
CC laboratory cultures, foods, beverages and industrial processes. The
CC oligonucleotides are specific for bacteria, without affecting metabolism
CC in mammalian cells. They may also activate RNase H and have a general,
CC non-specific immune-stimulating effect. The oligonucleotides can be
CC administered orally, intranasally, rectally, topically or by injection,
CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
CC enhances cellular uptake
XX
SQ Sequence 18 BP; 9 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2824 ATATATACATATATATAT 2841
              ||||||| ||||||||||
Db          1 ATATATATATATATATAT 18
```

RESULT 865
AAV21967/c
ID AAV21967 standard; DNA; 18 BP.
XX

```
AC   AAV21967;
XX
DT   14-JUL-1998  (first entry)
XX
DE   Nuclease resistant antisense oligo NBT 140 targeted against (AT)9.
XX
KW   Nuclease resistant; bacterial infection; antibiotic; target;
KW   veterinary medicine; treatment; human; industrial process;
KW   bacterial control; ss.
XX
OS   Synthetic.
XX
PN   WO9803533-A1.
XX
PD   29-JAN-1998.
XX
PF   23-JUL-1997;   97WO-US012961.
XX
PR   24-JUL-1996;   96US-00685575.
XX
PA   (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
XX
PI   Arrow A,  Dale RMK,  Thompson TL;
XX
DR   WPI; 1998-120687/11.
XX
PT   Treating bacterial infections in humans or animals with
PT   oligo:nucleotide(s) - resistant to nuclease and targetted to bacterial
PT   nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
PT   with antibiotics.
XX
PS   Claim 49; Page 87; 163pp; English.
XX
CC   This antisense oligonucleotide is nuclease resistant and can be used in
CC   the treatment of animals, including humans, having a bacterial infection.
CC   The treatment comprises administration of such nuclease resistant
CC   oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
CC   and formulated with a carrier. A compound comprising this nuclease
CC   resistant oligonucleotide can be covalently linked to an antibiotic. The
CC   method is used to treat infections by a wide variety of Gram-positive and
CC   Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
CC   The methods are particularly used in immuno-compromised individuals (e.g.
CC   patients with acquired immunodeficiency syndrome or those receiving
CC   chemotherapy or radiation therapy), optionally in combination with, or
CC   fused to, antiviral or other antimicrobial oligonucleotides. Apart from
CC   therapeutic use, the oligonucleotides can be used to control bacteria in
CC   laboratory cultures, foods, beverages and industrial processes. The
CC   oligonucleotides are specific for bacteria, without affecting metabolism
CC   in mammalian cells. They may also activate RNase H and have a general,
CC   non-specific immune-stimulating effect. The oligonucleotides can be
CC   administered orally, intranasally, rectally, topically or by injection,
CC   optionally coupled to an agent (e.g. carbohydrate or polyamine) that
CC   enhances cellular uptake
XX
SQ   Sequence 18 BP; 9 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2824 ATATATACATATATATAT 2841
              ||||||| ||||||||||
Db         18 ATATATATATATATATAT 1


RESULT 866
AAX19941
ID   AAX19941 standard; DNA; 18 BP.
XX
AC   AAX19941;
XX
DT   14-JUN-1999  (first entry)
XX
DE   Primer SEQ ID NO:1 from JP11075880.
XX
KW   Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
XX
OS   Synthetic.
XX
PN   JP11075880-A.
XX
PD   23-MAR-1999.
XX
PF   10-JUL-1998;   98JP-00195719.
XX
PR   14-JUL-1997;   97JP-00205378.
XX
PA   (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX
DR   WPI; 1999-257710/22.
XX
PT   Labelling of an oligonucleotide - useful for detecting genes.
XX
PS   Example 1; Page 7; 10pp; Japanese.
XX
CC   A method has been developed for labelling an oligonucleotide having a
CC   repeated sequence of (XY)n (where X and Y consists of a combination of
CC   adenine and thymine or uracil or guanine and cytosine, and n is an
CC   integer of 1 or more ) at the 3'-terminal side in which the repeated
CC   sequence is added and extended using a labelled body of the nucleotide
CC   constituting the repeated sequence and a DNA polymerase lacked in 5' to
CC   3' exonuclease activity. The method can be used for detecting a gene. The
CC   method can detect a gene in a sensitivity up to ten times higher than
CC   prior art methods. The present sequence represents a primer used in an
CC   example from the present invention
XX
SQ   Sequence 18 BP; 9 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2823 TATATATACATATATATA 2840
              |||||||| |||||||||
Db          1 TATATATATATATATATA 18


RESULT 867
AAX19941/c
ID   AAX19941 standard; DNA; 18 BP.
XX
AC   AAX19941;
XX
DT   14-JUN-1999  (first entry)
XX
DE   Primer SEQ ID NO:1 from JP11075880.
XX
KW   Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
XX
OS   Synthetic.
XX
PN   JP11075880-A.
XX
PD   23-MAR-1999.
XX
PF   10-JUL-1998;   98JP-00195719.
XX
PR   14-JUL-1997;   97JP-00205378.
XX
PA   (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX
DR   WPI; 1999-257710/22.
XX
PT   Labelling of an oligonucleotide - useful for detecting genes.
XX
PS   Example 1; Page 7; 10pp; Japanese.
```

```
XX
CC   A method has been developed for labelling an oligonucleotide having a
CC   repeated sequence of (XY)n (where X and Y consists of a combination of
CC   adenine and thymine or uracil or guanine and cytosine, and n is an
CC   integer of 1 or more ) at the 3'-terminal side in which the repeated
CC   sequence is added and extended using a labelled body of the nucleotide
CC   constituting the repeated sequence and a DNA polymerase lacked in 5' to
CC   3' exonuclease activity. The method can be used for detecting a gene. The
CC   method can detect a gene in a sensitivity up to ten times higher than
CC   prior art methods. The present sequence represents a primer used in an
CC   example from the present invention
XX
SQ   Sequence 18 BP; 9 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2823 TATATATACATATATATA 2840
              |||||||| |||||||||
Db         18 TATATATATATATATATA 1


RESULT 868
AAX77484/c
ID   AAX77484 standard; DNA; 18 BP.
XX
AC   AAX77484;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 28.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; ss.
XX
OS   Synthetic.
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 27-28; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 10 A; 8 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2316 TCTGTGTGTGTGTGTGTG 2333
              | ||||||||||||||||
Db         18 TTTGTGTGTGTGTGTGTG 1


RESULT 869
AAX77457/c
ID   AAX77457 standard; DNA; 18 BP.
XX
AC   AAX77457;
XX
DT   05-AUG-1999  (first entry)
XX
DE   US5912147 primer 1.
XX
KW   Primer; quantitation; genetic instability; tumour cell; detection;
KW   neoplastic transformation; carcinogenesis; ss.
XX
OS   Synthetic.
XX
PN   US5912147-A.
XX
PD   15-JUN-1999.
XX
PF   22-OCT-1996;   96US-00734973.
XX
PR   22-OCT-1996;   96US-00734973.
XX
PA   (HEAL-) HEALTH RES INC.
XX
PI   Anderson G,  Stoler D,  Basik M;
XX
DR   WPI; 1999-357197/30.
XX
PT   Quantitating genetic instability.
XX
PS   Claim 4; Col 15-16; 27pp; English.
XX
CC   This invention describes a novel method for quantitating genetic
CC   instability independent of microsatellite alterations by treating a
CC   comparison pair comprising genomic DNA from tumour cells and genomic DNA
CC   from normal cells. The method involves the cells from the same individual
CC   with oligonucleotide primers selected from (i) a nucleotide sequence
CC   (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
CC   7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
CC   pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
CC   a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
CC   nucleotide sequence (CG)xYY, where Y is a pyrimidine selected from
CC   cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
CC   (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
CC   16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
CC   adenine and guanine and Y is a pyrimidine selected from cytosine,
CC   thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
CC   where R is a purine selected from adenine and guanine and x = 6-16,
CC   (viii) a nucleotide sequence (CA)xYY, where Y is a pyrimidine selected
CC   from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
CC   of the primers. The method is useful for detecting genomic instability
CC   which are commonly associated with the various stages of neoplastic
CC   transformation and carcinogenesis. The method is rapid and simple
XX
SQ   Sequence 18 BP; 9 A; 8 C; 1 G; 0 T; 0 U; 0 Other;
```

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2334 CGTGTGTGTGTGTGTGTG 2351
              | ||||||||||||||||
Db         18 CTTGTGTGTGTGTGTGTG 1


RESULT 870
AAI64450/c
ID   AAI64450 standard; DNA; 18 BP.
XX
AC   AAI64450;
XX
DT   23-NOV-2001  (first entry)
XX
DE   SSR motif #10.
XX
KW   Simple Sequence Repeat; SSR; clover; microsatellite; genome mapping;
KW   trait mapping; marker-assisted selection; gene selection; legume;
KW   DNA profiling; breeding; ds.
XX
OS   Unidentified.
XX
PN   NZ509194-A.
XX
PD   25-MAY-2001.
XX
PF   03-JAN-2001; 2001NZ-00509194.
XX
PR   24-DEC-1999;   99AU-00004907.
PR   28-MAR-2000; 2000AU-00006520.
XX
PA   (AGRI-) AGRIC VICTORIA SERVICES PTY LTD.
XX
PI   Koelliker R,  Forster JW;
XX
DR   WPI; 2001-431058/46.
XX
PT   Novel simple sequence repeats in clover species useful for selection of
PT   genes in legume breeding, for profiling legume species varieties and for
PT   testing the purity of legume seed batches.
XX
PS   Claim 6; Page 35; 52pp; English.
XX
CC   The present invention relates to Simple Sequence Repeats (SSRs) from
CC   clover species. SSRs, also called microsatellites, are based on a 1-7
CC   nucleotide core element which is tandemly repeated. The SSR array is
CC   embedded in complex flanking DNA. SSRs are ideal markers for genome
CC   mapping, trait mapping and marker-assisted selection. The SSRs may be
CC   used in methods for selecting genes in clover/ legume breeding. The SSRs
CC   are also useful for DNA profiling of clover varieties and for testing the
CC   purity of legume seed batches. The present sequence is a SSR motif, which
CC   was used in the present invention
XX
SQ   Sequence 18 BP; 8 A; 10 C; 0 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2328 TGTGTGCGTGTGTGTGTG 2345
              |||||| ||||||||||
Db         18 TGTGTGGGTGTGTGTGTG 1


RESULT 871
ABL38718
ID   ABL38718 standard; DNA; 18 BP.
XX
AC   ABL38718;
XX
DT   16-APR-2002  (first entry)
XX
DE   Immunostimulatory nucleic acid SEQ ID NO: 85.
XX
KW   Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW   angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "phosphorothioate backbone"
XX
PN   WO200197843-A2.
XX
PD   27-DEC-2001.
XX
PF   22-JUN-2001; 2001WO-US020154.
XX
PR   22-JUN-2000; 2000US-0213346P.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
XX
PI   Weiner G,  Hartmann G;
XX
DR   WPI; 2002-154611/20.
XX
PT   Treating or preventing cancer, such as basal cell carcinoma, comprises
PT   administering immunostimulatory nucleic acids that induce expression of
PT   cell surface antigens and antibodies to a subject having or at risk of
PT   developing cancer.
XX
PS   Disclosure; Page 116; 312pp; English.
XX
CC   The present invention relates to methods for treating or preventing
CC   cancer, involving administering to a subject having or at risk of
CC   developing cancer immunostimulatory nucleic acids that induce expression
CC   of cell surface antigens and antibodies. The methods are useful for
CC   treating or preventing cancer such as basal cell carcinoma, bladder
CC   cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC   breast cancer, cervical cancer, colon and rectum cancer, connective
CC   tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC   cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC   Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC   cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC   cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC   present sequence is an immunostimulatory oligonucleotide described in the
CC   exemplification of the invention
XX
SQ   Sequence 18 BP; 9 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2824 ATATATACATATATATAT 2841
              ||||||| ||||||||||
Db          1 ATATATATATATATATAT 18


RESULT 872
ABL38718/c
ID   ABL38718 standard; DNA; 18 BP.
XX
AC   ABL38718;
XX
DT   16-APR-2002  (first entry)
XX
DE   Immunostimulatory nucleic acid SEQ ID NO: 85.
XX
KW   Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
```

```
KW   angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .18
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate backbone"
XX
PN   WO200197843-A2.
XX
PD   27-DEC-2001.
XX
PF   22-JUN-2001; 2001WO-US020154.
XX
PR   22-JUN-2000; 2000US-0213346P.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
XX
PI   Weiner G,  Hartmann G;
XX
DR   WPI; 2002-154611/20.
XX
PT   Treating or preventing cancer, such as basal cell carcinoma, comprises
PT   administering immunostimulatory nucleic acids that induce expression of
PT   cell surface antigens and antibodies to a subject having or at risk of
PT   developing cancer.
XX
PS   Disclosure; Page 116; 312pp; English.
XX
CC   The present invention relates to methods for treating or preventing
CC   cancer, involving administering to a subject having or at risk of
CC   developing cancer immunostimulatory nucleic acids that induce expression
CC   of cell surface antigens and antibodies. The methods are useful for
CC   treating or preventing cancer such as basal cell carcinoma, bladder
CC   cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC   breast cancer, cervical cancer, colon and rectum cancer, connective
CC   tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC   cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC   Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC   cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC   cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC   present sequence is an immunostimulatory oligonucleotide described in the
CC   exemplification of the invention
XX
SQ   Sequence 18 BP; 9 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2824 ATATATACATATATATAT 2841
              ||||||| ||||||||||
Db         18 ATATATATATATATATAT 1


RESULT 873
ABX79779
ID   ABX79779 standard; cDNA; 18 BP.
XX
AC   ABX79779;
XX
DT   17-APR-2003  (first entry)
XX
DE   EST polymorphic DNA repeat polynucleotide #104.
XX
KW   EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
KW   polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
KW   Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
KW   Haw River syndrome; Huntington's disease; fragile-X syndrome;
KW   Fredreich's ataxis; myotonic dystrophy; hyperandrogenaemia;
KW   spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
XX
OS   Homo sapiens.
XX
PN   US6472154-B1.
XX
PD   29-OCT-2002.
XX
PF   31-DEC-1999;   99US-00475947.
XX
PR   31-DEC-1999;   99US-00475947.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Garner HR,  Wren JD,  Minna JD,  Fondon JW;
XX
DR   WPI; 2003-208818/20.
XX
PT   Identifying a candidate polymorphic repeat within a coding sequence, for
PT   understanding or treating genetic disease, comprises detecting tandem
PT   repeats in a target coding sequence and scoring the repeats for
PT   polymorphic probability.
XX
PS   Example; Col 385; 588pp; English.
XX
CC   The invention discloses a method for identifying a candidate polymorphic
CC   repeat within a coding sequence (expressed sequence tag, EST), which
CC   comprises detecting tandem repeats in a target coding sequence, scoring
CC   the repeats for polymorphic probability and generating a dataset
CC   correlating the repeats with polymorphic probability to identify a
CC   candidate polymorphic repeat. The computational methods (polymorphic
CC   marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are
CC   useful for identifying and detecting candidate polymorphic repeats in
CC   human genes, which can be used to understand, treat or eliminate genetic
CC   diseases, predispositions or adverse drug-treatment reactions. Examples
CC   of diseases linked to nucleotide repeats are Machado-Joseph, Haw River
CC   syndrome, Huntington's disease, fragile-X syndrome, Fredreich's ataxis,
CC   myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and
CC   spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are
CC   the polymorphic repeats identified for a search of human ESTs
XX
SQ   Sequence 18 BP; 8 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2822 GTATATATACATATATAT 2839
              ||||||||| ||||||||
Db          1 GTATATATATATATATAT 18


RESULT 874
ADH70642/c
ID   ADH70642 standard; DNA; 19 BP.
XX
AC   ADH70642;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human Vbeta gene repeat sequence #432.
XX
KW   human; T-cell associated disease; Vbeta; autoimmune disease;
KW   degenerative nervous system disease; graft versus host disease;
KW   hypersensitivity disease; infectious disease; neoplastic disease;
KW   Addison's disease; atrophic gastritis;
KW   degenerative nervous system disease; multiple sclerosis;
KW   Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW   allergy; type II hypersensitivity; Goodpasture's syndrome;
KW   type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW   HIV; fungal infection; Candida; parasitic infection; schistosome;
KW   filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW   lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW   breast cancer; ds.
```

```
XX
OS   Homo sapiens.
XX
PN   US2002150891-A1.
XX
PD   17-OCT-2002.
XX
PF   05-MAR-1999;   99US-00263959.
XX
PR   19-SEP-1994;   94US-00309335.
PR   19-SEP-1995;   95US-00531241.
XX
PA   (HOOD/) HOOD L E.
PA   (ROWE/) ROWEN L.
XX
PI   Hood LE,  Rowen L;
XX
DR   WPI; 2004-059052/06.
XX
PT   Kit for diagnozing and treating T-cell associated diseases e.g.
PT   autoimmune, degenerative nervous system and infectious disease, comprises
PT   nucleic acid primers specifically priming and allowing amplification of a
PT   Vbeta gene.
XX
PS   Disclosure; SEQ ID NO 836; 164pp; English.
XX
CC   The invention relates to a kit for diagnosing and treating T-cell
CC   associated diseases which comprises a panel of nucleic acid primers
CC   specifically priming and allowing amplification of each Vbeta gene,
CC   VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC   rejection and diagnosing and treating T-cell associated diseases
CC   including autoimmune diseases, degenerative nervous system diseases,
CC   graft versus host disease, hypersensitivity diseases, infectious diseases
CC   and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC   atrophic gastritis. Degenerative nervous system diseases include multiple
CC   sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC   I hypersensitivities such as contact with allergens that lead to
CC   allergies, Type II hypersensitivities such as those present in
CC   Goodpasture's syndrome and Type IV hypersensitivities such as those
CC   manifested in leprosy. Infectious diseases include viral infections
CC   caused by viruses such as HIV, fungal infections such as those caused by
CC   the yeast genus Candida, parasitic infections such as those caused by
CC   schistosomes, filaria and bacterial infections such as those caused by
CC   Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC   such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC   breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ   Sequence 19 BP; 10 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 19;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3463 TATATATATCTATATATA 3480
              ||||||||| ||||||||
Db         18 TATATATATTTATATATA 1


RESULT 875
AAH91916/c
ID   AAH91916 standard; DNA; 19 BP.
XX
AC   AAH91916;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human inflammatory bowel disease associated polymorphic site #991.
XX
KW   Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;
KW   single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;
KW   chromosome 5q31-33; forensic test; gene therapy; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    10
FT                   /*tag=  a
FT                   /note= "SNP, optionally T or C at this position"
XX
PN   WO200142511-A2.
XX
PD   14-JUN-2001.
XX
PF   11-DEC-2000; 2000WO-US033632.
XX
PR   10-DEC-1999;   99US-0170257P.
PR   10-APR-2000; 2000US-0196046P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.
XX
PI   Daly M,  Hudson TJ,  Lander ES,  Rioux J,  Siminovitch K;
XX
DR   WPI; 2001-367874/38.
XX
PT   Testing for the presence of polymorphisms associated with inflammatory
PT   bowel disease, using a hybridization assay.
XX
PS   Claim 1; Page 80; 463pp; English.
XX
CC   The present invention describes a method for detecting the presence of
CC   polymorphisms associated with inflammatory bowel diseases such as
CC   ulcerative colitis and Crohn's disease. The methods can be used to detect
CC   the presence of genetic polymorphisms associated with inflammatory bowel
CC   disease and correlating their occurrence with disease states. They may be
CC   used in this way for phenotypic correlations, forensics, paternity
CC   testing, medicine and genetic analysis. The present sequence is a
CC   polymorphic site described in the exemplification of the invention
XX
SQ   Sequence 19 BP; 3 A; 7 C; 5 G; 3 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       255 CAAGAAGCTGCTGGCCGTG 273
             ||||| ||| |||||||||
Db        19 CAAGAGGCTNCTGGCCGTG 1


RESULT 876
ADE29900
ID   ADE29900 standard; RNA; 19 BP.
XX
AC   ADE29900;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:522.
XX
KW   short interfering nucleic acid; siNA; downregulation; inhibition;
KW   mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW   cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW   immunosuppressive; antibacterial; antirheumatic; antiarthritic;
KW   antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
KW   inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW   psoriasis; inflammatory bowel disease; drug screening;
KW   genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS   Synthetic.
XX
PN   WO2003072590-A1.
XX
PD   04-SEP-2003.
XX
PF   28-JAN-2003; 2003WO-US002510.
```

```
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI   Mcswiggen J,  Beigelman L,  Usman N,  Haeberli P,  Chowrira B;
XX
DR   WPI; 2003-689980/65.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of cancer, downregulates expression of mitogen-activated
PT   protein kinase genes.
XX
PS   Example 3; SEQ ID NO 522; 164pp; English.
XX
CC   The present invention describes a short interfering nucleic acid (siNA)
CC   that downregulates expression of a mitogen-activated protein kinase
CC   (MAPK) genes by RNA interference. Also described: (1) a method for
CC   modulating expression of MAPK genes in cells, tissue explants or
CC   organisms by introduction of siNA; (2) kits for in vitro or in vivo
CC   delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
CC   vectors that express siNA and cells containing these vectors. MAPK siNAs
CC   have cytostatic, anorectic, antidiabetic, antiinflammatory,
CC   antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
CC   antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
CC   siNAs can be used to modulate the expression of MAPK genes, in cells,
CC   tissue explants or organisms, e.g. for treating obesity; diabetes types I
CC   and II; a wide range of tumours, and inflammatory diseases (asthma,
CC   septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
CC   disease). They can also be used for drug screening; diagnosis; target
CC   identification and validation; genetic engineering; pharmacogenomics;
CC   studying gene function and gene mapping (e.g. of single-nucleotide
CC   polymorphisms). The present sequence represents a MAPK siNA which is used
CC   in the exemplification of the present invention.
XX
SQ   Sequence 19 BP; 3 A; 5 C; 8 G; 0 T; 3 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 19;
  Best Local Similarity   83.3%;  Pred. No. 1.1e+03;
  Matches   15;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2905 GGCAGGCATGGCCCTGGG 2922
              ||||||||:|||||:| |
Db          1 GGCAGGCAUGGCCCUGAG 18


RESULT 877
ADE29795/c
ID   ADE29795 standard; RNA; 19 BP.
XX
AC   ADE29795;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:417.
XX
KW   short interfering nucleic acid; siNA; downregulation; inhibition;
KW   mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW   cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW   immunosuppressive; antibacterial; antirheumatic; antiarthritic;
KW   antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
KW   inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW   psoriasis; inflammatory bowel disease; drug screening;
KW   genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS   Synthetic.
XX
PN   WO2003072590-A1.
XX
PD   04-SEP-2003.
XX
PF   28-JAN-2003; 2003WO-US002510.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI   Mcswiggen J,  Beigelman L,  Usman N,  Haeberli P,  Chowrira B;
XX
DR   WPI; 2003-689980/65.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of cancer, downregulates expression of mitogen-activated
PT   protein kinase genes.
XX
PS   Example 3; SEQ ID NO 417; 164pp; English.
XX
CC   The present invention describes a short interfering nucleic acid (siNA)
CC   that downregulates expression of a mitogen-activated protein kinase
CC   (MAPK) genes by RNA interference. Also described: (1) a method for
CC   modulating expression of MAPK genes in cells, tissue explants or
CC   organisms by introduction of siNA; (2) kits for in vitro or in vivo
CC   delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
CC   vectors that express siNA and cells containing these vectors. MAPK siNAs
CC   have cytostatic, anorectic, antidiabetic, antiinflammatory,
CC   antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
CC   antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
CC   siNAs can be used to modulate the expression of MAPK genes, in cells,
CC   tissue explants or organisms, e.g. for treating obesity; diabetes types I
CC   and II; a wide range of tumours, and inflammatory diseases (asthma,
CC   septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
CC   disease). They can also be used for drug screening; diagnosis; target
CC   identification and validation; genetic engineering; pharmacogenomics;
CC   studying gene function and gene mapping (e.g. of single-nucleotide
CC   polymorphisms). The present sequence represents a MAPK siNA which is used
CC   in the exemplification of the present invention.
XX
SQ   Sequence 19 BP; 3 A; 8 C; 5 G; 0 T; 3 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 19;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2905 GGCAGGCATGGCCCTGGG 2922
              ||||||||||||||||| |
Db         19 GGCAGGCATGGCCCTGAG 2


RESULT 878
ADF36101
ID   ADF36101 standard; RNA; 19 BP.
XX
AC   ADF36101;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:390.
XX
KW   double-stranded short interfering nucleic acid;
KW   short interfering nucleic acid; siNA; downregulation;
KW   vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW   cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW   nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW   diabetic retinopathy; macular degeneration; neovascular glaucoma;
```

KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 390; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 11 G; 0 T; 8 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 19;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 9; Conservative 8; Mismatches 1; Indels 0; Gaps 0;

Qy 2322 TGTGTGTGTGTGCGTGTG 2339
:|:|:|:|:|:| |:|:|
Db 1 UGUGUGUGUGUGGGUGUG 18

RESULT 879
ADF36528/c
ID ADF36528 standard; RNA; 19 BP.
XX
AC ADF36528;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:817.
XX
KW double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 817; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 8 A; 11 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2322 TGTGTGTGTGTGCGTGTG 2339

```
                    ||||||||||||| |||||
Db          19 TGTGTGTGTGTGGGTGTG 2


RESULT 880
ADF49790/c
ID   ADF49790 standard; RNA; 19 BP.
XX
AC   ADF49790;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human BCL2 siNA lower sequence SEQ ID NO:518.
XX
KW   ss; siNA; human; BCL2; short interfering nucleic acid; RNA interference;
KW   cytostatic; immunosuppressive; virucide; anti-HIV; cancer;
KW   autoimmune disease; viral infection; HIV.
XX
OS   Homo sapiens.
XX
PN   WO2003070969-A2.
XX
PD   28-AUG-2003.
XX
PF   18-FEB-2003; 2003WO-US004908.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   18-JUL-2002; 2002US-0396905P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L;
XX
DR   WPI; 2003-712622/67.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of cancer or autoimmune disease, downregulates expression of
PT   the BCL2 gene.
XX
PS   Example 3; SEQ ID NO 518; 148pp; English.
XX
CC   The invention relates to a novel short interfering nucleic acid (siNA)
CC   that downregulates expression of the BCL2 gene by RNA interference. A
CC   siNA of the invention has cytostatic, immunosuppressive, virucide, and
CC   anti-HIV activity. The siNA are useful for modulation (inhibition) of
CC   expression or activity of BCL2 by RNA interference. siNA are used to
CC   modulate expression of BCL2 genes, in cells, tissue explants or
CC   organisms, e.g. for treating cancer, autoimmune diseases and viral
CC   infections (including by HIV) but also for drug screening, diagnosis,
CC   target identification and validation, genetic engineering,
CC   pharmacogenomics, studying gene function and gene mapping (e.g. of single
CC   -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
CC   represent siNA of the invention.
XX
SQ   Sequence 19 BP; 4 A; 9 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 19;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1873 GTGGAGGAGCTCTTCAAG 1890
                ||||||||||||||||| |
Db         18 GTGGAGGAGCTCTTCAGG 1


RESULT 881
ADF49376
ID   ADF49376 standard; RNA; 19 BP.
XX
AC   ADF49376;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human BCL2 siNA lower sequence SEQ ID NO:104.
XX
KW   ss; siNA; human; BCL2; short interfering nucleic acid; RNA interference;
KW   cytostatic; immunosuppressive; virucide; anti-HIV; cancer;
KW   autoimmune disease; viral infection; HIV.
XX
OS   Homo sapiens.
XX
PN   WO2003070969-A2.
XX
PD   28-AUG-2003.
XX
PF   18-FEB-2003; 2003WO-US004908.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   18-JUL-2002; 2002US-0396905P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L;
XX
DR   WPI; 2003-712622/67.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of cancer or autoimmune disease, downregulates expression of
PT   the BCL2 gene.
XX
PS   Example 3; SEQ ID NO 104; 148pp; English.
XX
CC   The invention relates to a novel short interfering nucleic acid (siNA)
CC   that downregulates expression of the BCL2 gene by RNA interference. A
CC   siNA of the invention has cytostatic, immunosuppressive, virucide, and
CC   anti-HIV activity. The siNA are useful for modulation (inhibition) of
CC   expression or activity of BCL2 by RNA interference. siNA are used to
CC   modulate expression of BCL2 genes, in cells, tissue explants or
CC   organisms, e.g. for treating cancer, autoimmune diseases and viral
CC   infections (including by HIV) but also for drug screening, diagnosis,
CC   target identification and validation, genetic engineering,
CC   pharmacogenomics, studying gene function and gene mapping (e.g. of single
CC   -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
CC   represent siNA of the invention.
XX
SQ   Sequence 19 BP; 3 A; 3 C; 9 G; 0 T; 4 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 19;
  Best Local Similarity   72.2%;  Pred. No. 1.1e+03;
  Matches   13;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1873 GTGGAGGAGCTCTTCAAG 1890
                |:|||||||:|::|| |
Db          2 GUGGAGGAGCUCUUCAGG 19


RESULT 882
AAT41101
ID   AAT41101 standard; DNA; 20 BP.
XX
AC   AAT41101;
XX
DT   03-DEC-1996  (first entry)
XX
```

```
DE   Human gene signature HUMGS01562-derived sense primer.
XX
KW   Gene signature; messenger RNA; mRNA; relative abundance; frequency;
KW   human; cloning; mapping; non-biased library; diagnosis; detection;
KW   cell typing; abnormal cell function; primer; PCR; amplification;
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   WO9514772-A1.
XX
PD   01-JUN-1995.
XX
PF   11-NOV-1994;   94WO-JP001916.
XX
PR   12-NOV-1993;   93JP-00355504.
XX
PA   (MATS/) MATSUBARA K.
PA   (OKUB/) OKUBO K.
XX
PI   Matsubara K,  Okubo K;
XX
DR   WPI; 1995-206931/27.
XX
PT   Single-stranded DNA for identifying gene signatures - isolated from 3'-
PT   directed human cDNA library that reflects relative abundance of corresp.
PT   mRNA in specific human tissues.
XX
PS   Example 7; Fig 7; 2245pp; Japanese.
XX
CC   Primers T41001-T41382 are derived from novel human gene signature (GS)
CC   sequences which did not match with sequences deposited in Genbank release
CC   76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
CC   libraries prepared from various human tissues; synthesis of cDNA was
CC   initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
CC   Each library is constructed so as to reflect accurately the relative
CC   abundance of different mRNAs in the particular tissue from which it was
CC   derived. The appearance frequency of a given GS in a cDNA library can be
CC   determined (esp. using primers and probes derived from the GS sequences)
CC   as a means of diagnosing abnormal cell function or for recognising
CC   different cell types. The primers T41101-2 amplify clone pm2619 which
CC   comprises the GS HUMGS001562 (T20562), located on chromosome 6
XX
SQ   Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1250 TCGGCATTGACAAGGACC 1267
              || ||||||||||||||||
Db          1 TCTGCATTGACAAGGACC 18


RESULT 883
AAT93903
ID   AAT93903 standard; DNA; 20 BP.
XX
AC   AAT93903;
XX
DT   03-FEB-1998  (first entry)
XX
DE   Primer for exon 8 of endothelial nitrogen monoxide synthase gene.
XX
KW   Exon 8; PCR primer; single stranded conformational polymorphism; SSCP;
KW   analysis; endothelial nitrogen monoxide synthase; eNOS;
KW   genetic screening; coronary arterial spasm; angina pectoris; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9718327-A1.
XX
PD   22-MAY-1997.
XX
PF   13-NOV-1996;   96WO-JP003324.
XX
PR   13-NOV-1995;   95JP-00319504.
PR   28-JUN-1996;   96JP-00168761.
XX
PA   (SHIO ) SHIONOGI & CO LTD.
XX
PI   Yasue H,  Yoshimura M;
XX
DR   WPI; 1997-289303/26.
XX
PT   Genetic screening for diseases associated with coronary arterial spasm -
PT   by assessment of the occurrence of specific mutation(s) of the
PT   endothelial nitrogen monoxide synthase gene.
XX
PS   Example 1; Page 14; 47pp; Japanese.
XX
CC   The present sequence is an exon 8 primer for the polymerase chain
CC   reaction-single stranded conformational polymorphism (PCR-SSCP) analysis
CC   of the endothelial nitrogen monoxide synthase (eNOS) gene. The PCR-SSCP
CC   analysis was used in an example of genetic screening method for diseases
CC   associated with coronary arterial spasm, which comprises determining if 1
CC   or more specific nucleotides in the eNOS gene have been substituted,
CC   specifically G894T, C774T, T(-786)C, A(-922)G and T(-1468)A. Screening
CC   for diseases associated with coronary spasm, e.g angina pectoris, cannot
CC   be easily carried out by existing methods, this method allows rapid and
CC   easy detection
XX
SQ   Sequence 20 BP; 6 A; 10 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3064 TGTTCCCACACCCCAACA 3081
              || ||||||||||||||||
Db          3 TGATCCCACACCCCAACA 20


RESULT 884
AAC92592/c
ID   AAC92592 standard; DNA; 20 BP.
XX
AC   AAC92592;
XX
DT   27-MAR-2001  (first entry)
XX
DE   Human nucleolin phosphorothioate antisense oligonucleotide, SEQ ID NO:42.
XX
KW   Human nucleolin; P92; C23; phosphoprotein; ribosome biogenesis;
KW   ribosome transport; cytokinesis; nucleogenesis; cell proliferation;
KW   cell growth; transcriptional repression; replication;
KW   signal transduction; chromatin decondensation; Ag-NOR family;
KW   nucleolin antibody; systemic connective tissue disease; SLE;
KW   systemic lupus erythematosus;
KW   scleroderma-like chronic graft versus host disease;
KW   expression inhibition; tumour formation; cancer; inflammation;
KW   immune disorder; phosphorothioate; antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
PN   US6165786-A.
XX
PD   26-DEC-2000.
XX
PF   03-NOV-1999;   99US-00433699.
XX
PR   03-NOV-1999;   99US-00433699.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
```

PI Bennett CF, Cowsert LM;
XX
DR WPI; 2001-079848/09.
XX
PT Novel antisense compound targeted to human nucleolin which specifically
PT hybridizes with and inhibits the expression of human nucleolin, useful
PT for modulating the expression of nucleolin in cells.
XX
PS Claim 14; Col 41-42; 41pp; English.
XX
CC Sequences AAC92560-C92639 represent antisense oligonucleotides targetted
CC to the human nucleolin gene, which inhibit its expression. The antisense
CC oligonucleotides were designed to target different regions of the human
CC nucleolin mRNA, and were analysed for their effect on nucleolin mRNA
CC levels by quantitative real-time PCR. Nucleolin (also known as P92 or
CC C23) is the most abundant nucleolar phosphoprotein in actively growing
CC cells. Nucleolin primarily participates in ribosome biogenesis and
CC transport of ribosomal components, being able to transiently bind to pre-
CC ribosomes in the nucleolus via a ribonucleoprotein consensus sequence.
CC However, it has also been shown to be involved in cytokinesis,
CC nucleogenesis, cell proliferation and growth, transcriptional repression,
CC replication, signal transduction, and chromatin decondensation. Nucleolin
CC is a member of the Ag-NOR (active ribosomal gene located in the nucleolar
CC organiser region) family of proteins which are markers of active
CC ribosomal genes, and whose expression is associated with the prediction
CC of tumour growth rate. The presence of antibodies against nucleolin are
CC associated with systemic connective tissue diseases such as systemic
CC lupus erythematosus (SLE) and scleroderma-like chronic graft versus host
CC disease. The oligonucleotides of the invention are useful for diagnosis,
CC prevention and treatment of conditions associated with nucleolin
CC expression, such as tumour formation, immune disorders and inflammation
XX
SQ Sequence 20 BP; 4 A; 7 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1353 GGAGATGATGAAGATGAT 1370
| ||||||||||||||||
Db 19 GAAGATGATGAAGATGAT 2

RESULT 885
ABS97835/c
ID ABS97835 standard; DNA; 20 BP.
XX
AC ABS97835;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human NADPH quinone oxidoreductase 2 (NQO2) polymorphic sequence #43.
XX
KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
KW single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO200257410-A2.
XX
PD 25-JUL-2002.
XX
PF 28-NOV-2001; 2001WO-US044838.
XX
PR 28-NOV-2000; 2000US-00724389.
XX
PA (DNAS-) DNA SCI LAB INC.
XX
PI Guida M, Hall J;
XX
DR WPI; 2002-698522/75.
XX
PT Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.
XX
PS Example 16; Page 131; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterising the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2315 GTCTGTGTGTGTGTGTGT 2332
|| ||||||||||||||||
Db 18 GTATGTGTGTGTGTGTGT 1

RESULT 886
ACC49689/c
ID ACC49689 standard; DNA; 20 BP.

```
XX
AC   ACC49689;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Human KSR chimeric phosphorothioate oligonucleotide SEQ ID NO:59.
XX
KW   Human; kinase suppressor of ras-1; KSR; cytostatic; KSR inhibitor;
KW   antisense gene therapy; hyperproliferative disorder; phosphorothioate;
KW   developmental disorder; antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls (2'-MOE)"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls (2'-MOE)"
XX
PN   WO2003025144-A2.
XX
PD   27-MAR-2003.
XX
PF   19-SEP-2002; 2002WO-US029705.
XX
PR   20-SEP-2001; 2001US-00961001.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Freier SM;
XX
DR   WPI; 2003-363140/34.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding KSR, useful for treating a disease/condition
PT   associated with KSR, such as hyperproliferative or developmental
PT   disorders.
XX
PS   Claim 3; Page 75; 102pp; English.
XX
CC   The present invention describes a compound 8-50 nucleobases in length
CC   targeted to, and which specifically hybridises with a nucleic acid
CC   molecule encoding kinase suppressor of ras-1 (KSR), and inhibits the
CC   expression of KSR. Also described: (1) a compound 8-50 nucleobases in
CC   length that specifically hybridises with at least an 8-nucleobase portion
CC   of an active site on a nucleic acid molecule encoding KSR; (2) a
CC   composition comprising the compound and a carrier or diluent; (3)
CC   inhibiting the expression of KSR in cells or tissues by contacting the
CC   cells or tissues with the compound so that expression of KSR is inhibited
CC   ; and (4) treating an animal having a disease or condition associated
CC   with KSR by administering to the animal a therapeutic or prophylactic
CC   amount of the compound so that expression of KSR is inhibited. The
CC   compound has cytostatic activity and can be used as a KSR inhibitor, and
CC   in antisense gene therapy. The compound, composition and methods are
CC   useful for treating a disease or condition associated with KSR, such as a
CC   hyperproliferative or developmental disorder, or a disease or condition
CC   arising from aberrant apoptosis by inhibiting the expression of KSR. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of KSR. The present sequence represents a chimeric phosphorothioate
CC   antisense oligonucleotide of human KSR, which is used in an example from
CC   the present invention
XX
SQ   Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1672 ATCGCAGACTTCGGGCTG 1689
              ||| ||||||||||||||
Db         20 ATCACAGACTTCGGGCTG 3


RESULT 887
ACC80119/c
ID   ACC80119 standard; DNA; 20 BP.
XX
AC   ACC80119;
XX
DT   01-AUG-2003  (first entry)
XX
DE   VEGFR-2 antisense oligonucleotide #42.
XX
KW   Human; vascular endothelial growth factor receptor-2; cytostatic;
KW   angiogenic; antiangiogenic; antiarthritic; antirheumatic; antisense;
KW   VEGFR-2; hyperproliferative disorder; cancer; rheumatoid arthritis;
KW   angiogenesis; phosphorothioate; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 5 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2003029266-A1.
XX
PD   10-APR-2003.
XX
PF   26-SEP-2002; 2002WO-US030734.
XX
PR   28-SEP-2001; 2001US-00967655.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Watt AT;
XX
DR   WPI; 2003-371980/35.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding vascular endothelial growth factor receptor-2
PT   (VEGFR-2), useful for treating a disease/condition associated with VEGFR-
PT   2, e.g. cancer.
XX
PS   Claim 3; Page 83; 127pp; English.
XX
CC   The present invention relates to novel antisense oligonucleotides
CC   (ACC71728-ACC71750 and ACC80101-ACC80155) targeted to Vascular
CC   Endothelial Growth Factor Receptor-2 (VEGFR-2) nucleotide sequence, and
CC   which inhibit the expression of VEGFR-2. The oligonucleotides are useful
CC   in compositions for treating a disease or condition associated with VEGFR
CC   -2, such as hyperproliferative disorder, e.g. cancer, a disease or
CC   condition involving angiogenesis, or rheumatoid arthritis
XX
SQ   Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1584 GGGCATGGAGTACTTGGC 1601
              |||||||||| ||||||
Db         19 GGGCATGGAGTTCTTGGC 2
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RESULT 888
ADF87844/c
ID   ADF87844 standard; DNA; 20 BP.
XX
AC   ADF87844;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Single nucleotide polymorphism detection primer, SEQ ID No 1427.
XX
KW   human; single nucleotide polymorphism; microarray; side effect; ss;
KW   primer; PCR.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   JP2003235571-A.
XX
PD   26-AUG-2003.
XX
PF   12-FEB-2002; 2002JP-00034717.
XX
PR   12-FEB-2002; 2002JP-00034717.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2003-820454/77.
XX
PT   Novel polynucleotide useful for detecting single nucleotide polymorphisms
PT   in human gene.
XX
PS   Claim 2; SEQ ID NO 1427; 704pp; Japanese.
XX
CC   The invention relates to a novel polynucleotide isolated and purified
CC   from a human gene having any one of 935 fully defined sequences as given
CC   in specification, or a sequence having a base substitution. The invention
CC   further relates to: an oligonucleotide containing single nucleotide
CC   polymorphisms; a PCR primer set chosen from the combination of two DNA
CC   fragments from any one of 1220 fully defined sequences as given in
CC   specification; a labelling probe containing the SNP containing oligo; and
CC   a microarray equipped with the SNP containing oligo. The isolated human
CC   gene of the invention is useful for detecting the single nucleotide
CC   polymorphisms in human gene. The isolated human gene is also useful for
CC   diagnosis of disease and determination of side effect to a medical agent.
CC   The isolated human gene is also effective in detecting single nucleotide
CC   polymorphisms in a human gene. This polynucleotide sequence represents
CC   one of the PCR primers used in the single nucleotide polymorphism
CC   detection method of the invention.
XX
SQ   Sequence 20 BP; 8 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2327 GTGTGTGCGTGTGTGTGT 2344
              ||||||||  |||||||||
Db         19 GTGTGTGCCTGTGTGTGT 2


RESULT 889
ADP75264/c
ID   ADP75264 standard; DNA; 20 BP.
XX
AC   ADP75264;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human NRG2 gene exon A SSCP reverse primer #1.
XX
KW   Human; SSCP; ss; primer; ADAM19; Endophilin 1; Endophilin 2; NRG2;
KW   ADAMTS2; a disintegrin and metalloprotease; neuroregulin 2; SNP;
KW   single nucleotide polymorphism;
KW   a disintegrin and metalloprotease with thrombospondin type1 motif 2;
KW   asthma; atopy; obesity; inflammatory bowel disease; respiratory disorder;
KW   single-strand conformation polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO2003031594-A2.
XX
PD   17-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032700.
XX
PR   11-OCT-2001; 2001US-0328424P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Keith T,  Little RD,  Van Eerdewegh P,  Dupuis J,  Del Mastro RG;
PI   Allen K;
XX
DR   WPI; 2003-381712/36.
XX
PT   New isolated nucleic acid or alternate splice variant, useful for
PT   diagnosing and treating a disintegrin and metalloprotease (ADAM) or
PT   interactor gene-associated disorder, e.g. asthma, atopy, obesity or
PT   inflammatory bowel disease.
XX
PS   Claim 2; Page 124; 338pp; English.
XX
CC   The invention relates to an isolated nucleic acid or alternate splice
CC   variant comprising a nucleotide sequence containing at least one of the
CC   single nucleotide polymorphisms given in the specification, a nucleotide
CC   sequence having at least 15 contiguous nucleotides of them, or
CC   complements of them. The genes are ADAM19 (a disintegrin and
CC   metalloprotease 19, also known as gene 845), NRG2 (neuroregulin 2, also
CC   known as gene 847), endophilin 1 (also known as gene 874), endophilin 2
CC   (also known as gene 803) and ADAMTS2 (a disintegrin and metalloprotease
CC   with thrombospondin type1 motif 2, also known as gene 962). Also included
CC   are a vector comprising the isolated nucleic acid (or alternate splice
CC   variant), a host cell containing the vector, an isolated polypeptide
CC   encoded by the novel nucleic acid (or alternate splice variant), an
CC   antibody or antibody fragment that binds to the polypeptide,
CC   pharmaceutical compositions (comprising the nucleic acid or alternate
CC   splice variant, vector, polypeptide or antibody , and a carrier,
CC   excipient or diluent), a kit for detecting a disintegrin and
CC   metalloprotease (ADAM) gene nucleotide sequence (comprising the isolated
CC   nucleic acid or alternate splice variant, antibody or antibody fragment,
CC   and at least one component to detect the hybridisation of the variant or
CC   the binding of the antibody to an ADAM gene amino acid sequence), a kit
CC   for detecting an interactor gene amino acid sequence (comprising the
CC   antibody or antibody fragment, and at least one component to detect the
CC   binding of the antibody to the interactor gene amino acid sequence),
CC   diagnosing an ADAM or interactor gene-associated disorder or a
CC   respiratory disorder in a human subject, determining an ADAM or
CC   interactor gene pharmacogenetic profile in a human subject, identifying
CC   an orthologue of a human ADAM or interactor gene, treating an ADAM or
CC   interactor gene-associated disorder (or a respiratory disorder) by
CC   administering the pharmaceutical composition, a transgenic mouse (whose
CC   genome comprises an introduced null mutation in an endogenous gene that
CC   is orthologous to a human ADAM gene), making a homozygous transgenic
CC   knockout mouse, forming a crystal of the isolated polypeptide, a cell
CC   line comprising the isolated nucleic acid or alternate splice variant, a
CC   biochip comprising the isolated nucleic acid or alternate splice variant,
CC   an isolated nucleic acid probe or primer comprising at least 8 contiguous
CC   nucleotides of the nucleic acid, an isolated antisense nucleic acid,
CC   identifying an ADAM or interactor gene ligand and an isolated nucleic
CC   acid variant of Gene 803, 845, 847, 874 or 962. The nucleic acid or
CC   alternate splice variants, methods, kits and antibody/antibody fragment
CC   are useful for diagnosing and treating an ADAM or interactor gene-
CC   associated disorder, e.g. asthma, atopy, obesity or inflammatory bowel
CC   disease. The present sequence is an SSCP (single-strand conformation
CC   polymorphism) primer used to analyse the above genes for the presence of
```

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CC   polymorphisms.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2632 CCACATGTCCAGCACCTT 2649
              |||| ||||||||||||
Db         20 CCACTTGTCCAGCACCTT 3


RESULT 890
ADK96906/c
ID   ADK96906 standard; DNA; 20 BP.
XX
AC   ADK96906;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #2626.
XX
KW   human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS   Synthetic.
XX
PN   JP2003259875-A.
XX
PD   16-SEP-2003.
XX
PF   08-MAR-2002; 2002JP-00064373.
XX
PR   08-MAR-2002; 2002JP-00064373.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2004-093977/10.
XX
PT   Novel polynucleotide useful for PCR amplification along with two DNA
PT   fragment from another set of sequences, or for detecting single
PT   nucleotide polymorphism in human gene.
XX
PS   Claim 2; SEQ ID NO 5935; 2627pp; Japanese.
XX
CC   The present invention relates to a polynucleotide isolated from a human
CC   gene and is useful for detecting a single nucleotide polymorphism in a
CC   human gene or for diagnosing of disease. The invention enables the
CC   detection of a single nucleotide polymorphism in a human gene. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        327 CTCCATCTCCTGGCTGAA 344
              |||||||| |||||||||
Db         20 CTCCATCTGCTGGCTGAA 3


RESULT 891
ADM14911/c
ID   ADM14911 standard; DNA; 20 BP.
XX
AC   ADM14911;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1098.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 1098; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 8 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy       2316 TCTGTGTGTGTGTGTGTG 2333
              || ||||||||||||||||
Db         18 TCCGTGTGTGTGTGTGTG 1
```

RESULT 892
AAZ18180/c
ID AAZ18180 standard; DNA; 21 BP.
XX
AC AAZ18180;
XX
DT 11-OCT-1999 (first entry)
XX
DE PTK 25 gene specific primer.
XX
KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
PD 08-JUL-1999.
XX
PF 28-DEC-1998; 98WO-IL000625.
XX
PR 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
PA (GENE-) GENENA LTD.
XX
PI Vider B;
XX
DR WPI; 1999-419113/35.
DR P-PSDB; AAY14715.
XX
PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
PS Claim 4; Page 46; 102pp; English.
XX
CC The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1801 GACGTCTGGTCCTTTGGG 1818
              ||||| ||||||||||||
Db         18 GACGTGTGGTCCTTTGGG 1
```

RESULT 893
AAZ18186/c
ID AAZ18186 standard; DNA; 21 BP.
XX
AC AAZ18186;
XX
DT 11-OCT-1999 (first entry)
XX
DE PTK 28 gene specific primer.
XX
KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
PD 08-JUL-1999.
XX
PF 28-DEC-1998; 98WO-IL000625.
XX
PR 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
PA (GENE-) GENENA LTD.
XX
PI Vider B;
XX
DR WPI; 1999-419113/35.
DR P-PSDB; AAY14721.
XX
PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
PS Claim 4; Page 46; 102pp; English.
XX
CC The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1801 GACGTCTGGTCCTTTGGG 1818
              ||||| ||||||||||||
Db         18 GACGTGTGGTCCTTTGGG 1
```

RESULT 894

```
AAZ18176/c
ID   AAZ18176 standard; DNA; 21 BP.
XX
AC   AAZ18176;
XX
DT   11-OCT-1999  (first entry)
XX
DE   PTK 22 gene specific primer.
XX
KW   Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW   genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW   kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW   primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9934016-A2.
XX
PD   08-JUL-1999.
XX
PF   28-DEC-1998;   98WO-IL000625.
XX
PR   29-DEC-1997;   97IL-00122793.
PR   16-OCT-1998;   98IL-00126627.
XX
PA   (GENE-) GENENA LTD.
XX
PI   Vider B;
XX
DR   WPI; 1999-419113/35.
DR   P-PSDB; AAY14711.
XX
PT   Identifying and characterizing cells by comparing the pattern of gene
PT   expression in a selected gene family.
XX
PS   Claim 4; Page 46; 102pp; English.
XX
CC   The invention provides a new method for identifying and characterising
CC   cells. The method for determining the genetic proximity of a first cell
CC   and a second cell comprises: (a) obtaining the first cell and the second
CC   cell; (b) determining in the first cell and the second cell the pattern
CC   of expression of genes in a selected gene family; and (c) calculating a
CC   proximity index using a specified formula. The methods can be used for
CC   characterising cells, e.g. for determining the origin of a cell, its
CC   genetic status, whether it carries a genetic defect, or whether it is
CC   transformed. They can be used for detecting a selected genetic defect in
CC   an individual, e.g. a fetus. They can also be used for determining the
CC   effect of a selected treatment on a test cell. They can also be used for
CC   obtaining cells capable of expressing an homeobox related desired
CC   property. The method uses reverse transcriptase polymerase chain reaction
CC   (RT-PCR) for determining the pattern of gene expression in a selected
CC   gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC   in the RT-PCR reactions to determine the pattern of gene expression. The
CC   gene family can be selected from a set of homeobox genes, kinase genes,
CC   protein phosphatase genes, P450 enzyme genes, steroid receptor
CC   superfamily genes or cadherin superfamily genes
XX
SQ   Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1801 GACGTCTGGTCCTTTGGG 1818
              ||||| ||||||||||||
Db         18 GACGTGTGGTCCTTTGGG 1

RESULT 895
AAZ18170/c
ID   AAZ18170 standard; DNA; 21 BP.
XX
AC   AAZ18170;
XX
DT   11-OCT-1999  (first entry)
XX
DE   PTK 19 gene specific primer.
XX
KW   Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW   genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW   kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW   primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9934016-A2.
XX
PD   08-JUL-1999.
XX
PF   28-DEC-1998;   98WO-IL000625.
XX
PR   29-DEC-1997;   97IL-00122793.
PR   16-OCT-1998;   98IL-00126627.
XX
PA   (GENE-) GENENA LTD.
XX
PI   Vider B;
XX
DR   WPI; 1999-419113/35.
DR   P-PSDB; AAY14705.
XX
PT   Identifying and characterizing cells by comparing the pattern of gene
PT   expression in a selected gene family.
XX
PS   Claim 4; Page 46; 102pp; English.
XX
CC   The invention provides a new method for identifying and characterising
CC   cells. The method for determining the genetic proximity of a first cell
CC   and a second cell comprises: (a) obtaining the first cell and the second
CC   cell; (b) determining in the first cell and the second cell the pattern
CC   of expression of genes in a selected gene family; and (c) calculating a
CC   proximity index using a specified formula. The methods can be used for
CC   characterising cells, e.g. for determining the origin of a cell, its
CC   genetic status, whether it carries a genetic defect, or whether it is
CC   transformed. They can be used for detecting a selected genetic defect in
CC   an individual, e.g. a fetus. They can also be used for determining the
CC   effect of a selected treatment on a test cell. They can also be used for
CC   obtaining cells capable of expressing an homeobox related desired
CC   property. The method uses reverse transcriptase polymerase chain reaction
CC   (RT-PCR) for determining the pattern of gene expression in a selected
CC   gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC   in the RT-PCR reactions to determine the pattern of gene expression. The
CC   gene family can be selected from a set of homeobox genes, kinase genes,
CC   protein phosphatase genes, P450 enzyme genes, steroid receptor
CC   superfamily genes or cadherin superfamily genes
XX
SQ   Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1801 GACGTCTGGTCCTTTGGG 1818
              ||||| ||||||||||||
Db         18 GACGTGTGGTCCTTTGGG 1

RESULT 896
AAZ18192/c
ID   AAZ18192 standard; DNA; 21 BP.
XX
AC   AAZ18192;
XX
DT   11-OCT-1999  (first entry)
```

XX
DE PTK 32 gene specific primer.
XX
KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
PD 08-JUL-1999.
XX
PF 28-DEC-1998; 98WO-IL000625.
XX
PR 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
PA (GENE-) GENENA LTD.
XX
PI Vider B;
XX
DR WPI; 1999-419113/35.
DR P-PSDB; AAY14727.
XX
PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
PS Claim 4; Page 47; 102pp; English.
XX
CC The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 21 BP; 7 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 21;
Best Local Similarity 94.4%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1801 GACGTCTGGTCCTTTGGG 1818
||||| ||||||||||||
Db 18 GACGTGTGGTCCTTTGGG 1

RESULT 897
AAC69306
ID AAC69306 standard; DNA; 21 BP.
XX
AC AAC69306;
XX
DT 29-JAN-2001 (first entry)
XX
DE Human ABC1 gene promoter polymorphic site, SEQ ID NO:205.
XX
KW Human ABC1 cholesterol transporter; chromosome 9q31;
KW ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
KW Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
KW cardiovascular disease; coronary artery disease; coronary restenosis;
KW cerebrovascular disease; peripheral vascular disease;
KW Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
KW X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
KW prognosis; prophylaxis; drug screening; transgenic animal; ds.
XX
OS Homo sapiens.
XX
PN WO200055318-A2.
XX
PD 21-SEP-2000.
XX
PF 15-MAR-2000; 2000WO-IB000532.
XX
PR 15-MAR-1999; 99US-0124702P.
PR 08-JUN-1999; 99US-0138048P.
PR 17-JUN-1999; 99US-0139600P.
PR 01-SEP-1999; 99US-0151977P.
XX
PA (UYBR-) UNIV BRITISH COLUMBIA.
PA (XENO-) XENON BIORESEARCH INC.
XX
PI Hayden MR, Wilson AR, Pimstone SN;
XX
DR WPI; 2000-587528/55.
XX
PT New ABC1 polypeptide is useful for treating diseases associated with ABC1
PT biological activity, e.g. Alzheimer's disease, Huntington's disease and
PT cancer.
XX
PS Example; Fig 11; 229pp; English.
XX
CC The invention relates to the human ABC1 cholesterol transporter protein
CC (B38082) and to nucleic acid sequences (C69120) which encode it. ABC1 is
CC a member of the ATP-binding cassette (ABC transporter) superfamily of
CC proteins, and plays a crucial role in cholesterol transport, particularly
CC intracellular cholesterol trafficking in monocytes and fibroblasts, being
CC involved in cholesterol efflux from the cell. The gene encoding ABC1 is
CC located on chromosome 9q31, and mutations in this gene are associated
CC with two genetic HDL (high density lipoprotein) deficiency disorders,
CC Tangier disease (TD) and familial HDL deficiency (FHA). These diseases
CC are distinguishable in that TD is an autosomal recessive disorder, while
CC FHA is inherited as an autosomal dominant trait. Low levels of HDL ("good
CC cholesterol") in the blood correlate with a high risk of cardiovascular
CC disease, particularly coronary artery disease, but also cerebrovascular
CC disease, coronary restenosis, and peripheral vascular disease.
CC Conversely, a high level of HDL has protective effects against
CC cardiovascular disease. The invention provides genetic constructs and
CC transgenic cells and non-human animals comprising human ABC1 nucleic
CC acids, and methods of gene therapy for the treatment or prevention of
CC cardiovascular disease comprising the administration of an expression
CC vector encoding ABC1 or an active fragment thereof. The invention also
CC encompasses compounds which mimic ABC1 activity, compounds which
CC stimulate ABC1 expression and methods of screening for such compounds. It
CC further relates to methods for determining whether a patient has an
CC increased risk for cardiovascular disease due to polymorphisms in the
CC ABC1 gene. Human ABC1 proteins and nucleotides can be used to treat or
CC prevent cardiovascular disease, especially coronary artery disease,
CC cerebrovascular disease, coronary restenosis or peripheral vascular
CC disease. They may also be used in the treatment of diseases associated
CC with ABC1 biological activity, such as Alzheimer's disease, Niemann-Pick
CC disease, Huntington's disease, X-linked adrenoleukodystrophy and cancer.
CC The invention specifically excludes proteins with the exact amino acid
CC sequences of GenBank Accession No: CAA10005.1 and X75926, and the nucleic
CC acid with the exact sequence as GenBank Accession No: AJ012376.1. The
CC present sequence represents a polymorphic site of the human ABC1 gene
XX
SQ Sequence 21 BP; 2 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 21;

```
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        497 ACACGCTGGACGTGCTGG 514
              ||||||||| ||||||||
Db          1 ACACGCTGGGCGTGCTGG 18


RESULT 898
AAA73573/c
ID   AAA73573 standard; DNA; 21 BP.
XX
AC   AAA73573;
XX
DT   29-NOV-2000  (first entry)
XX
DE   Forward PCR primer for loblolly pine locus RIPPT11.
XX
KW   PCR primer; loblolly pine; Simple Sequence Repeat; SSR;
KW   microsatellite DNA repeat; genetic marker; mapping; inheritance study;
KW   population genetics study; plant breeding programme; ss.
XX
OS   Pinus taeda.
XX
PN   WO200042210-A2.
XX
PD   20-JUL-2000.
XX
PF   06-JAN-2000; 2000WO-US000325.
XX
PR   15-JAN-1999;   99US-00232884.
PR   19-JAN-1999;   99US-00232785.
XX
PA   (INTO ) INT PAPER CO.
PA   (ECHT/) ECHT C S.
PA   (NELS/) NELSON C D.
PA   (USDA ) US SEC OF AGRIC.
XX
PI   Echt CS,  Nelson CD;
XX
DR   WPI; 2000-482836/42.
XX
PT   Polynucleotide having simple sequence repeat useful as markers in plants
PT   for genetic characterization e.g. genetic mapping study, an inheritance
PT   study of a commercially important trait in a plant breeding program.
XX
PS   Claim 6; Page 21; 57pp; English.
XX
CC   The present invention relates to loblolly pine polynucleotides with one
CC   or more Simple Sequence Repeats (SSRs) (see AAA74205-A74322). SSRs are
CC   also known as microsatellite DNA repeats. The SSRs are useful as genetic
CC   markers for genetic mapping, population genetics studies and inheritance
CC   studies in various plant breeding programmes. The present sequence is a
CC   PCR primer used for detecting the presence of a SSR locus in a pine
CC   genomic DNA sample
XX
SQ   Sequence 21 BP; 2 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3575 AAAGCTTGGAGGGAAGCC 3592
              |||||||||| ||||||
Db         18 AAAGCTTGGAGAGAAGCC 1


RESULT 899
AAF92948
ID   AAF92948 standard; DNA; 21 BP.
XX
AC   AAF92948;
XX
DT   17-MAY-2001  (first entry)
XX
DE   Polymorphic sequence for ABC1 polymorphic site #18.
XX
KW   High density lipoprotein-cholesterol; HDL-C; cardiovascular; ABC1; ds.
XX
OS   Homo sapiens.
XX
PN   WO200115676-A2.
XX
PD   08-MAR-2001.
XX
PF   01-SEP-2000; 2000WO-IB001492.
XX
PR   01-SEP-1999;   99US-0151977P.
PR   15-MAR-2000; 2000US-00526193.
PR   23-JUN-2000; 2000US-0213958P.
XX
PA   (UYBR-) UNIV BRITISH COLUMBIA.
PA   (XENO-) XENON GENETICS INC.
XX
PI   Hayden MR,  Brooks-Wilson AR,  Pimstone SN,  Clee SM;
XX
DR   WPI; 2001-244356/25.
XX
PT   Treating a lower than normal high density lipoprotein-cholesterol (HDL-C)
PT   level, a higher than normal triglyceride level, or a cardiovascular
PT   disease, by administering a compound that modulates LXR- or RXR-mediated
PT   transcriptional activity.
XX
PS   Disclosure; Fig 4; 317pp; English.
XX
CC   The present invention relates to a method for treating a patient
CC   diagnosed as having a lower than normal high density lipoprotein-
CC   cholesterol (HDL-C) level, a higher than normal triglyceride level, or a
CC   cardiovascular disease, involving administering a compound that modulates
CC   LXR- or RXR-mediated transcriptional activity or ABC1 expression or
CC   activity. The LXR gene product may be used in an assay to identify
CC   compounds useful for the treatment of a disease or condition selected a
CC   lower than normal HDL cholesterol level, a higher than normal
CC   triglyceride level, and a cardiovascular disease
XX
SQ   Sequence 21 BP; 2 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        497 ACACGCTGGACGTGCTGG 514
              ||||||||| ||||||||
Db          1 ACACGCTGGGCGTGCTGG 18


RESULT 900
AAH89131
ID   AAH89131 standard; DNA; 21 BP.
XX
AC   AAH89131;
XX
DT   09-SEP-2004  (revised)
DT   27-FEB-2002  (first entry)
XX
DE   Human polymorphic oligonucleotide U63963 fragment #13.
XX
KW   Human; single nucleotide polymorphic; SNP; forensic science;
KW   paternity testing; phenotypic trait; genetic mapping; animal breeding;
KW   plant breeding; ds.
XX
OS   Homo sapiens.
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   variation       11
```

```
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200134840-A2.
XX
PD   17-MAY-2001.
XX
PF   10-NOV-2000; 2000WO-US030766.
XX
PR   10-NOV-1999;   99US-0164596P.
XX
PA   (GLAX ) GLAXO GROUP LTD.
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Au K,  Chen J,  Patil N,  Thomas D;
XX
DR   WPI; 2001-335945/35.
XX
PT   New polymorphic sites derived from the human genome are useful to
PT   determine sites correlating with phenotypic traits, particularly disease,
PT   and also in forensics and paternity testing.
XX
PS   Claim 87; Page 14; 43pp; English.
XX
CC   The present invention relates to human oligonucleotides comprising a
CC   single nucleotide polymorphic site (SNP: AAH88797-AAH89219). The present
CC   sequence is one such oligonucleotide. The oligonucleotides can be used in
CC   forensics, paternity testing, correlation of polymorphisms with
CC   phenotypic traits, genetic mapping of phenotypic traits and marker
CC   assisted breeding of animals and crop plants
CC
CC   Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
SQ   Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1820 TCCTGCTCTGGGAGATCT 1837
              |||| ||||||||||||
Db          4 TCCTCCTCTGGGAGATCT 21


RESULT 901
ADD44681/c
ID   ADD44681 standard; DNA; 21 BP.
XX
AC   ADD44681;
XX
DT   15-JAN-2004  (first entry)
XX
DE   DNA encoding pLC671 partial sequence with insert #1.
XX
KW   human; tumour necrosis factor alpha; vascular inflammation; anti-TNF;
KW   tumour necrosis factor; cA2; Kawasaki's pathology;
KW   disseminated intravascular coagulation; atherosclerosis; ds; gene.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             10. .21
FT                   /*tag=  a
XX
PN   US2003181695-A1.
XX
PD   25-SEP-2003.
XX
PF   21-FEB-2003; 2003US-00371961.
XX
PR   18-MAR-1991;   91US-00670827.
PR   18-MAR-1992;   92US-00853606.
PR   11-SEP-1992;   92US-00943852.
PR   29-JAN-1993;   93US-00010406.
PR   02-FEB-1993;   93US-00013413.
PR   04-FEB-1994;   94US-00192093.
PR   04-FEB-1994;   94US-00192102.
PR   04-FEB-1994;   94US-00192861.
PR   18-OCT-1994;   94US-00324799.
PR   11-DEC-1995;   95US-00570674.
PR   12-AUG-1998;   98US-00133119.
PR   08-JAN-2001; 2001US-00756398.
XX
PA   (UYNY ) UNIV NEW YORK STATE.
XX
PI   Le J,  Vilcek J,  Daddona P,  Ghraveb J,  Knight D,  Siegel S;
XX
DR   WPI; 2003-831022/77.
DR   P-PSDB; ADD44680.
XX
PT   Treating a vascular inflammatory pathology, e.g. Kawasaki's pathology,
PT   comprises administering an anti-Tumor Necrosis Factor (TNF) chimeric
PT   antibody which competitively inhibits binding of TNF to a monoclonal
PT   antibody.
XX
PS   Disclosure; SEQ ID NO 28; 100pp; English.
XX
CC   The invention relates to a method of treating a vascular inflammatory
CC   pathology in a human, comprising administering a single or divided 0.5-15
CC   mg/kg dose at least once every 1-6 weeks of an anti-tumour necrosis
CC   factor (TNF) chimeric antibody which competitively inhibits binding of
CC   TNF to monoclonal antibody cA2. The invention is used to treat a vascular
CC   inflammatory pathology particularly Kawasaki's pathology or disseminated
CC   intravascular coagulation or atherosclerosis. The present sequence
CC   represents DNA encoding the pLC671 partial sequence with insert #1.
XX
SQ   Sequence 21 BP; 5 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1506 CTCCTTCGACACCTGCAA 1523
              ||||||| ||||||||||
Db         19 CTCCTTCAACACCTGCAA 2


RESULT 902
AAD64185/c
ID   AAD64185 standard; DNA; 21 BP.
XX
AC   AAD64185;
XX
DT   12-FEB-2004  (first entry)
XX
DE   pLC871 plasmid partial DNA fragment #2.
XX
KW   Human; joint inflammation; tumour necrosis factor; TNF; joint stiffness;
KW   rheumatoid arthritis; systemic lupus erythematosus; diabetes mellitus;
KW   angiogenesis; autoimmune pathology; graft versus host disease; cachexia;
KW   scleroderma; infection; circulatory collapse; inflammatory disease;
KW   inflammatory bowel disease; neurodegenerative disease; sepsis syndrome;
KW   Crohn's disease; ulcerative colitis; multiple sclerosis; angiogenesis;
KW   Huntington's disease; Alzheimer's disease; cancer-related angiogenesis;
KW   lymphoma; infantile haemangioma; alcohol-induced hepatitis; cytostatic;
KW   ocular neovascularisation; antiinflammatory; dermatological; nootropic;
KW   immunosuppressive; neuroprotective; hepatotropic; antiangiogenic;
KW   chimeric; gene; ds.
XX
OS   Chimeric - Homo sapiens.
OS   Chimeric - Unidentified.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .7
FT                   /*tag=  a
```

```
FT                   /note= "Leader intron"
FT   misc_feature    8. .18
FT                   /*tag=  b
FT                   /note= "Encodes incomplete leader peptide"
FT   CDS             10. .21
FT                   /*tag=  c
FT                   /product= "Peptide encoded by pLC871 partial DNA
FT                   fragment"
FT                   /note= "No start and stop codon"
FT                   /partial
FT   misc_feature    18. .19
FT                   /*tag=  d
FT                   /note= "Signal peptidase cleavage site"
XX
PN   US2003198634-A1.
XX
PD   23-OCT-2003.
XX
PF   21-FEB-2003; 2003US-00371443.
XX
PR   18-MAR-1991;   91US-00670827.
PR   18-MAR-1992;   92US-00853606.
PR   11-SEP-1992;   92US-00943852.
PR   29-JAN-1993;   93US-00010406.
PR   02-FEB-1993;   93US-00013413.
PR   04-FEB-1994;   94US-00192093.
PR   04-FEB-1994;   94US-00192102.
PR   04-FEB-1994;   94US-00192861.
PR   18-OCT-1994;   94US-00324799.
PR   11-DEC-1995;   95US-00570674.
PR   12-AUG-1998;   98US-00133119.
PR   08-JAN-2001; 2001US-00756398.
XX
PA   (UYNY ) UNIV NEW YORK STATE.
XX
PI   Le J,  Vilcek J,  Daddona P,  Ghrayeb J,  Knight D,  Siegel S;
XX
DR   WPI; 2003-852770/79.
DR   P-PSDB; ABW02408.
XX
PT   Use of anti-tumor necrosis factor (TNF) chimeric antibody for treating
PT   e.g. joint inflammation or joint stiffness, infections, inflammatory
PT   diseases, neurodegenerative disease, or malignant pathologies.
XX
PS   Example 26; SEQ ID NO 28; 0pp; English.
XX
CC   The invention relates to a novel method of treating joint inflammation in
CC   humans. The method involves administering an anti-tumour necrosis factor
CC   (TNF) chimeric antibody or its fragment, which competitively inhibits
CC   binding of TNF to monoclonal antibody cA2. The anti-TNF antibodies are
CC   useful for treating joint inflammation or joint stiffness associated with
CC   rheumatoid arthritis or systemic lupus erythematosus. They may also be
CC   used to treat angiogenesis, such as in the treatment of a VEGF-mediated
CC   disease or to treat TNF-related pathologies such as acute and chronic
CC   autoimmune pathologies (e.g. graft versus host disease, diabetes mellitus
CC   or scleroderma, infections (e.g. sepsis syndrome, cachexia or circulatory
CC   collapse), inflammatory diseases (e.g. ulcerative colitis, inflammatory
CC   bowel disease or Crohn's disease), neurodegenerative disease (e.g.
CC   multiple sclerosis, Huntington's disease or Alzheimer's disease),
CC   malignant pathologies (e.g. lymphoma, infantile haemangioma or cancer-
CC   related angiogenesis), alcohol-induced hepatitis and other diseases
CC   related to angiogenesis (e.g. ocular neovascularisation). The present
CC   sequence is pLC871 plasmid partial DNA fragment used in the
CC   exemplification of the invention
XX
SQ   Sequence 21 BP; 5 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1506 CTCCTTCGACACCTGCAA 1523
              ||||||| ||||||||||
```

```
Db         19 CTCCTTCAACACCTGCAA 2


RESULT 903
AAD63597/c
ID   AAD63597 standard; DNA; 21 BP.
XX
AC   AAD63597;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Plasmid pLC871 partial DNA fragment #2.
XX
KW   Human; ulcerative colitis; tumour necrosis factor; antiinflammatory; TNF;
KW   therapy; antiulcer; gastrointestinal; chimeric; gene; ds.
XX
OS   Chimeric - Homo sapiens.
OS   Chimeric - Unidentified.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .7
FT                   /*tag=  a
FT                   /note= "Leader intron"
FT   CDS             8. .21
FT                   /*tag=  c
FT                   /product= "Peptide encoded by pHC871 partial DNA
FT                   fragment"
FT                   /note= "No start and stop codon"
FT                   /partial
FT   misc_feature    8. .18
FT                   /*tag=  b
FT                   /note= "Encodes incomplete leader peptide"
FT   misc_feature    18. .19
FT                   /*tag=  d
FT                   /note= "Signal peptidase cleavage site"
XX
PN   US2003198641-A1.
XX
PD   23-OCT-2003.
XX
PF   04-MAR-2003; 2003US-00379866.
XX
PR   18-MAR-1991;   91US-00670827.
PR   18-MAR-1992;   92US-00853606.
PR   11-SEP-1992;   92US-00943852.
PR   29-JAN-1993;   93US-00010406.
PR   02-FEB-1993;   93US-00013413.
PR   04-FEB-1994;   94US-00192093.
PR   04-FEB-1994;   94US-00192102.
PR   04-FEB-1994;   94US-00192861.
PR   18-OCT-1994;   94US-00324799.
PR   11-DEC-1995;   95US-00570674.
PR   12-AUG-1998;   98US-00133119.
PR   08-JAN-2001; 2001US-00756398.
XX
PA   (UYNY ) UNIV NEW YORK STATE.
PA   (CENZ ) CENTOCOR INC.
XX
PI   Le J,  Vilcek J,  Daddona P,  Ghraveb J,  Knight D,  Siegel S;
XX
DR   WPI; 2003-852774/79.
DR   P-PSDB; ABW02043.
XX
PT   Treating human ulcerative colitis by administration of a tumor necrosis
PT   factor (TNF)-inhibiting amount of an anti-TNF chimeric antibody that
PT   competitively inhibits binding of TNF to monoclonal antibody cA2.
XX
PS   Example 26; Fig 29; 0pp; English.
XX
CC   The present invention relates to a method of treating ulcerative colitis
CC   in a human in need. The method involves administering a tumour necrosis
CC   factor (TNF)-inhibiting amount of an anti-TNF chimeric antibody that
CC   competitively inhibits binding of TNF to monoclonal antibody cA2. The
```

```
CC   methods and compositions are useful for treating ulcerative colitis in
CC   humans. The present sequence is pLC871 plasmid partial DNA fragment used
CC   in the exemplification of the invention
XX
SQ   Sequence 21 BP; 5 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1506 CTCCTTCGACACCTGCAA 1523
              ||||||| ||||||||||
Db         19 CTCCTTCAACACCTGCAA 2


RESULT 904
ADG27455/c
ID   ADG27455 standard; DNA; 21 BP.
XX
AC   ADG27455;
XX
DT   26-FEB-2004  (first entry)
XX
DE   pLC67I partial sequence with insert DNA #1.
XX
KW   psoriatic arthritis; chimeric antibody; pLC67I; human; ds; gene.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US2003204066-A1.
XX
PD   30-OCT-2003.
XX
PF   21-FEB-2003; 2003US-00371962.
XX
PR   18-MAR-1991;   91US-00670827.
PR   18-MAR-1992;   92US-00853606.
PR   11-SEP-1992;   92US-00943852.
PR   29-JAN-1993;   93US-00010406.
PR   02-FEB-1993;   93US-00013413.
PR   04-FEB-1994;   94US-00192093.
PR   04-FEB-1994;   94US-00192102.
PR   04-FEB-1994;   94US-00192861.
PR   18-OCT-1994;   94US-00324799.
PR   11-DEC-1995;   95US-00570674.
PR   12-AUG-1998;   98US-00133119.
PR   08-JAN-2001; 2001US-00756398.
XX
PA   (UYNY ) UNIV NEW YORK STATE.
XX
PI   Le J,  Vilcek J,  Daddona P,  Ghrayeb J,  Knight D,  Siegel S;
XX
DR   WPI; 2003-900677/82.
DR   P-PSDB; ADG27454.
XX
PT   Treating psoriatic arthritis in a human by administering to the human an
PT   anti-TNF chimeric antibody for a period of time, where the antibody
PT   inhibits binding of TNF to monoclonal antibody cA2.
XX
PS   Disclosure; SEQ ID NO 28; 100pp; English.
XX
CC   The invention relates to a method of treating psoriatic arthritis in a
CC   human which comprises administering to the human an anti-tumour necrosis
CC   factor (TNF) chimeric antibody for a period of time, where the antibody
CC   inhibits binding of TNF to monoclonal antibody cA2. The method is useful
CC   in treating psoriatic arthritis. The present sequence represents the
CC   pLC67I partial sequence with insert DNA.
XX
SQ   Sequence 21 BP; 5 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1506 CTCCTTCGACACCTGCAA 1523
              ||||||| ||||||||||
Db         19 CTCCTTCAACACCTGCAA 2


RESULT 905
ADM83174/c
ID   ADM83174 standard; DNA; 21 BP.
XX
AC   ADM83174;
XX
DT   03-JUN-2004  (first entry)
XX
DE   pLC671 vector peptide encoding DNA #1.
XX
KW   Tumour necrosis factor-alpha; TNF-alpha; pharmaceutical; diagnostic;
KW   TNF-mediated pathology; therapy; gene; ds.
XX
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   intron          1. .7
FT                   /*tag=  a
FT                   /note= "Leader intron"
FT   sig_peptide     8. .21
FT                   /*tag=  b
FT                   /note= "Leader sequence"
FT   CDS             10. .21
FT                   /*tag=  c
FT                   /product= "pLC671 vector peptide"
FT                   /partial
FT                   /note= "No start and stop codon"
XX
PN   US2003175837-A1.
XX
PD   18-SEP-2003.
XX
PF   02-JUL-2001; 2001US-00897724.
XX
PR   18-MAR-1991;   91US-00670827.
PR   18-MAR-1992;   92US-00853606.
PR   11-SEP-1992;   92US-00943852.
PR   29-JAN-1993;   93US-00010406.
PR   02-FEB-1993;   93US-00013413.
PR   04-FEB-1994;   94US-00192093.
XX
PA   (UYNY-) UNIV NEW YORK MEDICAL CENT.
XX
PI   Le J,  Vilcek J,  Daddona P,  Ghrayeb J,  Knight D,  Siegel S;
XX
DR   WPI; 2003-863846/80.
DR   P-PSDB; ADM83173.
XX
PT   Anti-idiotypic antibodies that bind specifically to chimeric or humanized
PT   antibodies that binds to human Tumor Necrosis Factor (TNF)alpha, useful
PT   for detecting TNFalpha in samples and for diagnosing TNFalpha mediated
PT   diseases.
XX
PS   Example XXIV; Fig 29; 90pp; English.
XX
CC   The present invention relates to anti-human tumour necrosis factor (TNF)-
CC   alpha antibodies, peptides and their encoding nucleic acids. The
CC   invention is useful in pharmaceutical and diagnostic compositions and
CC   production and in treating TNF-mediated pathologies. The present sequence
CC   is pLC671 vector peptide encoding DNA used in the invention.
XX
SQ   Sequence 21 BP; 5 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
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```
Qy       1506 CTCCTTCGACACCTGCAA 1523
              ||||||| ||||||||||
Db         19 CTCCTTCAACACCTGCAA 2
```

RESULT 906
ADJ97999
ID ADJ97999 standard; DNA; 21 BP.
XX
AC ADJ97999;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 772.
XX
KW human; ss; short interfering RNA; siRNA; angiogenesis;
KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
KW Flk-1/KDR; kinase domain region; diabetic retinopathy;
KW age-related macular degeneration; inflammatory disease; psoriasis;
KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour;
KW lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
KW antipsoriatic; antirheumatic; antiarthritic.
XX
OS Homo sapiens.
XX
PN WO2004009769-A2.
XX
PD 29-JAN-2004.
XX
PF 18-JUL-2003; 2003WO-US022444.
XX
PR 24-JUL-2002; 2002US-0398417P.
PR 14-NOV-2002; 2002US-00294228.
XX
PA (UYPE-) UNIV PENNSYLVANIA.
XX
PI Tolentino MJ, Reich SJ;
XX
DR WPI; 2004-203472/19.
XX
PT Novel short interfering RNA (siRNA) comprises sense and antisense RNA
PT strands, useful for inhibiting expression of human vascular endothelial
PT growth factor mRNA, for treating angiogenic disease, e.g. diabetic
PT retinopathy and cancer.
XX
PS Disclosure; SEQ ID NO 772; 218pp; English.
XX
CC This invention relates to novel compositions that comprise short
CC interfering RNA (siRNA) molecules, which can be used to inhibit
CC angiogenesis. Specifically, it refers to siRNAs that target and cause
CC RNAi-induced degradation of mRNA from human vascular endothelial growth
CC factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
CC region) genes, as well as mutants derived thereof. The present invention
CC describes sense and antisense RNA strands that form an RNA duplex and
CC bind to the target mRNA, such that expression is inhibited and the target
CC degraded. As such, siRNA administered in combination with a therapeutic
CC agent is useful for treating diseases associated with angiogenesis and
CC the overexpression of VEGF, which include diabetic retinopathy, age-
CC related macular degeneration, inflammatory disease, psoriasis and
CC rheumatoid arthritis. Furthermore, it can be used to treat various
CC cancers including breast, retinoblastoma, Wilm's tumour and lymphoma.
CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
CC antiarthritic activities. This oligonucleotide is a human Flk-1/KDR DNA
CC oligo, a target for siRNA inhibition of the invention.
XX
SQ Sequence 21 BP; 5 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 21;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1584 GGGCATGGAGTACTTGGC 1601
              |||||||||| ||||||
Db          3 GGGCATGGAGTTCTTGGC 20
```

RESULT 907
AAZ23807
ID AAZ23807 standard; DNA; 22 BP.
XX
AC AAZ23807;
XX
DT 18-JAN-2000 (first entry)
XX
DE Human Kv6.2 DNA containing an intron/exon boundary.
XX
KW Kv6.2; potassium channel protein; Kv2.1; myocardium; hippocampus; stroke;
KW propafenone; voltage-dependent potassium channel; therapy; treatment;
KW class IC anti-arrhythmic; cardiovascular disease; nervous system disease;
KW antihypertensive; cardioprotectant; learning disorder; memory disorder;
KW neurodegenerative disorder; epilepsy; ischemia; Parkinson's disease;
KW Alzheimer's disease; ss.
XX
OS Homo sapiens.
XX
PN DE19841413-C1.
XX
PD 23-SEP-1999.
XX
PF 06-AUG-1998; 98DE-01041413.
XX
PR 06-AUG-1998; 98DE-01041413.
XX
PA (GENI-) FORSCHUNGSGESELLSCHAFT GENION MBH.
XX
PI Netzer R, Pongs O;
XX
DR WPI; 1999-519712/44.
DR P-PSDB; AAY50345.
XX
PT New potassium channel protein, Kv6.2, used to screen for specific
PT modulators, potentially useful e.g. as antiarrhythmic agents.
XX
PS Disclosure; Page 22; 42pp; German.
XX
CC This invention describes a novel potassium channel protein (I) Kv6.2.
CC This protein forms, with the protein Kv2.1, voltage-dependent potassium
CC channels that are expressed preferentially in the myocardium and
CC hippocampus and have high affinity for propafenone. The channels are used
CC to identify specific modulators which are potentially useful as
CC therapeutic agents, particularly as class IC anti-arrhythmics, but more
CC generally agents for treating cardiovascular or nervous system diseases,
CC e.g. antihypertensives or cardioprotectants, or for treating learning and
CC memory disorders or neurodegenerative disorders such as epilepsy,
CC ischemia, stroke, or Parkinson's or Alzheimer's diseases. Nucleic acid
CC that encodes (I) is used for recombinant production of (I), particularly
CC to generate cells for drug screening. (I) is also used to raise specific
CC antibodies. This sequence encodes a fragment of the human Kv6.2 protein
CC which corresponds to an intron/exon boundary
XX
SQ Sequence 22 BP; 4 A; 4 C; 13 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.4;  DB 1;  Length 22;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+03;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        850 GCCGAGGAGGAGCTGGTG 867
              |||||||||||||| ||||
Db          1 GCCGAGGAGGAGCGGGTG 18
```

RESULT 908
ADF87858/c
ID ADF87858 standard; DNA; 22 BP.

XX
AC ADF87858;
XX
DT 26-FEB-2004 (first entry)
XX
DE Single nucleotide polymorphism detection primer, SEQ ID No 1441.
XX
KW human; single nucleotide polymorphism; microarray; side effect; ss;
KW primer; PCR.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN JP2003235571-A.
XX
PD 26-AUG-2003.
XX
PF 12-FEB-2002; 2002JP-00034717.
XX
PR 12-FEB-2002; 2002JP-00034717.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR WPI; 2003-820454/77.
XX
PT Novel polynucleotide useful for detecting single nucleotide polymorphisms
PT in human gene.
XX
PS Claim 2; SEQ ID NO 1441; 704pp; Japanese.
XX
CC The invention relates to a novel polynucleotide isolated and purified
CC from a human gene having any one of 935 fully defined sequences as given
CC in specification, or a sequence having a base substitution. The invention
CC further relates to: an oligonucleotide containing single nucleotide
CC polymorphisms; a PCR primer set chosen from the combination of two DNA
CC fragments from any one of 1220 fully defined sequences as given in
CC specification; a labelling probe containing the SNP containing oligo; and
CC a microarray equipped with the SNP containing oligo. The isolated human
CC gene of the invention is useful for detecting the single nucleotide
CC polymorphisms in human gene. The isolated human gene is also useful for
CC diagnosis of disease and determination of side effect to a medical agent.
CC The isolated human gene is also effective in detecting single nucleotide
CC polymorphisms in a human gene. This polynucleotide sequence represents
CC one of the PCR primers used in the single nucleotide polymorphism
CC detection method of the invention.
XX
SQ Sequence 22 BP; 10 A; 8 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 22;
Best Local Similarity 94.4%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2334 CGTGTGTGTGTGTGTGTG 2351
| ||||||||||||||||
Db 19 CTTGTGTGTGTGTGTGTG 2

RESULT 909
AAQ88807
ID AAQ88807 standard; cDNA to mRNA; 23 BP.
XX
AC AAQ88807;
XX
DT 25-MAR-2003 (revised)
DT 27-APR-1995 (first entry)
XX
DE BoPCaR I, bovine parathyroid calcium receptor PCR primer.
XX
KW BoPCaR I; bovine parathyroid calcium receptor; hyperparathyroidism; ss.
XX
OS Synthetic.
XX
PN WO9418959-A1.
XX
PD 01-SEP-1994.
XX
PF 23-FEB-1993; 93WO-US001642.
XX
PR 23-FEB-1993; 93WO-US001642.
XX
PA (BGHM) BRIGHAM & WOMENS HOSPITAL.
PA (NPSP-) NPS PHARM INC.
XX
PI Nemeth EF, Brown EM, Hebert SC, Van Wagenen BC, Balandrin MF;
PI Fuller FH, Del Mar EG;
XX
DR WPI; 1994-293958/36.
XX
PT Compsn. contg. partly new calci-mimetic and calcilytic cpds. - for
PT treating parathyroidism, Paget's disease etc. and for diagnosis, also new
PT ion receptors and associated nucleic acid, antibodies and transgenic
PT animals.
XX
PS Disclosure; Page 100; 283pp; English.
XX
CC AAQ88807 was used in combination with AAQ88808 as primers for the PCR
CC amplification of BoPCaR I, bovine parathyroid calcium receptor, which was
CC used to test the effectiveness of new calci-mimetics that mimics the
CC action of extracellular Ca ions. These calci-mimetics can be used in the
CC treatment of a variety of diseases associated with abnormal levels of Ca
CC in cells, blood and plasma, specifically hyperparathyroidism. (Updated on
CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 2 A; 6 C; 2 G; 6 T; 0 U; 7 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 23;
Best Local Similarity 70.0%; Pred. No. 1.3e+03;
Matches 14; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Qy 921 CTTCTTCCTGTTCATCCTGG 940
||:||||:||:|:| |||:|
Db 3 CTWCTTCYTGKTSAMCCTSG 22

RESULT 910
AAQ94426/c
ID AAQ94426 standard; DNA; 23 BP.
XX
AC AAQ94426;
XX
DT 25-MAR-2003 (revised)
DT 01-NOV-1995 (first entry)
XX
DE Human Rse rPTK primer.
XX
KW RSE; receptor protein tyrosine kinase; rPTK; diagnostic; therapy;
KW neurodegenerative disease; Alzheimer disease; Parkinson disease;
KW kidney disease; primer; polymerase chain reaction; PCR; ss.
XX
OS Synthetic.
XX
PN WO9514776-A1.
XX
PD 01-JUN-1995.
XX
PF 15-NOV-1994; 94WO-US013214.
XX
PR 23-NOV-1993; 93US-00157563.
PR 20-DEC-1993; 93US-00170558.
XX
PA (GETH) GENENTECH INC.
PA (NEWE-) NEW ENGLAND DEACONESS HOSPITAL.
XX
PI Godowski PJ, Mark MR, Scadden DT;
XX
DR WPI; 1995-206933/27.

```
XX
PT   Human and murine receptor protein tyrosine kinase(s) and corresp. DNA -
PT   for stimulation of cell growth and differentiation e.g. for treatment of
PT   neuro:degenerative and kidney diseases.
XX
PS   Example 1; Page 57; 119pp; English.
XX
CC   Primers given in AAQ94423-26, based on conserved sequences of tyrosine
CC   kinases, were used to amplify fragments of tyrosine kinase encoding genes
CC   from cDNA prepared from human brain RNA as an initial step toward the
CC   isolation of a new rTPK gene, Rse (AAQ94421). (Updated on 25-MAR-2003 to
CC   correct PN field.)
XX
SQ   Sequence 23 BP; 8 A; 6 C; 4 G; 3 T; 0 U; 2 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 23;
  Best Local Similarity   77.3%;  Pred. No. 1.3e+03;
  Matches   17;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1801 GACGTCTGGTCCTTTGGGGTCC 1822
              ||:||:|||||||||||  | |
Db         23 GAYGTSTGGTCCTTTGGAATTC 2


RESULT 911
ABX76679
ID   ABX76679 standard; DNA; 23 BP.
XX
AC   ABX76679;
XX
DT   04-APR-2003  (first entry)
XX
DE   Mouse heavy chain variable region PCR primer VH7 back #1.
XX
KW   Botulinum neurotoxin type A; BoNT/A; ss; PCR; primer; mouse; scFv;
KW   antibody; botulism; antibacterial; single chain antibody; immunoglobulin.
XX
OS   Mus sp.
XX
PN   US2002155114-A1.
XX
PD   24-OCT-2002.
XX
PF   31-AUG-1998;   98US-00144886.
XX
PR   31-AUG-1998;   98US-00144886.
XX
PA   (MARK/) MARKS J D.
PA   (AMER/) AMERSDORFER P.
XX
PI   Marks JD,  Amersdorfer P;
XX
DR   WPI; 2003-182618/18.
XX
PT   Novel antibody that specifically binds and neutralizes botulinum
PT   neurotoxin type A useful for neutralizing botulinum neurotoxin and
PT   treating botulism.
XX
PS   Example 1; Page 17; 31pp; English.
XX
CC   The invention relates to an isolated antibody that specifically binds to
CC   an epitope specifically bound by an antibody expressed by a clone such as
CC   clone S25, C25, C39, 1C6 and clone 1F3, where the antibody binds to and
CC   neutralises botulinum neurotoxin type A (BoNT/A). Also included are a
CC   polypeptide comprising BoNT/A neutralising epitope comprising an epitope
CC   which is specifically bound by the antibody, where the polypeptide is not
CC   a full-length botulinum neurotoxin H_c fragment and making an anti-BoNT/A
CC   antibody that neutralises BoNT/A (by contacting several antibodies with
CC   an epitope specifically bound by an antibody expressed by any of the
CC   novel clones and isolating an antibody that specifically binds to the
CC   epitope). The antibody is useful for neutralising a BoNT/A, by contacting
CC   botulinum neurotoxin type A with the antibody comprising VH CDR (heavy
CC   chain variable region complementarity determining region) and with a
CC   second anti-BoNT/A antibody which comprises a VH CDR, where the second
CC   antibody binds to a different epitope than the first anti-BoNT/A
CC   antibody. The antibody is useful in the treatment of pathologies
CC   associated with botulinum neurotoxin poisoning, for rapid
CC   detection/diagnosis of botulism and in the detection and/or
CC   quantification of BoNT/A in a biological sample obtained from an organism
CC   which is indicative of a Clostridium botulinum infection of the organism.
CC   The present sequence is a PCR primer used to amplify mouse immunoglobulin
CC   genes for isolation/expression of the single chain antibodies (scFv) of
CC   the invention
XX
SQ   Sequence 23 BP; 4 A; 2 C; 10 G; 5 T; 0 U; 2 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 23;
  Best Local Similarity   77.3%;  Pred. No. 1.3e+03;
  Matches   17;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              ||:| | ||||||||||: |||
Db          1 GARGTGAAGCTGGTGGARTCTG 22


RESULT 912
ABZ83680/c
ID   ABZ83680 standard; DNA; 23 BP.
XX
AC   ABZ83680;
XX
DT   14-MAY-2003  (first entry)
XX
DE   Toxicologically relevant human PCR primer #839.
XX
KW   Toxicologically relevant gene; toxicological response; PCR primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO2003016500-A2.
XX
PD   27-FEB-2003.
XX
PF   16-AUG-2002; 2002WO-US026514.
XX
PR   16-AUG-2001; 2001US-0313080P.
XX
PA   (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
XX
PI   Neft RE,  Dunn RT,  Adkins K,  Pickett GG,  Kier LD,  Schmeiser K;
PI   Alen P;
XX
DR   WPI; 2003-268322/26.
XX
PT   Determining a toxicological response to an agent, useful for screening of
PT   drugs, comprises comparing the expression profile of one or more human
PT   toxic response genes to a reference gene expression profile indicative of
PT   toxicity.
XX
PS   Claim 1; Page 258; 455pp; English.
XX
CC   The present invention describes a method (M1) for determining a
CC   toxicological response to an agent, which comprises comparing the
CC   expression profile of one or more human toxic response genes to a
CC   reference gene expression profile indicative of toxicity, and so
CC   determining the presence of a toxic response to the agent. Also
CC   described: (1) an array comprising one or more polynucleotides selected
CC   from the genes corresponding to the partial sequences given in ABZ82842
CC   to ABZ84764, or their fragments of at least 20 nucleotides, or homologues
CC   ; and (2) determining if a gene putatively identified to be a toxic
CC   response gene plays a role on toxic response pathways by determining the
CC   expression profile of the gene after exposure of cells or a human subject
CC   to a known toxic pharmaceutical or industrial agent, comprising: (a)
CC   exposing cells to an agent or isolating cells from a human subject who
CC   was exposed to an agent; (b) obtaining the test gene expression profile
```

CC for a putatively identified toxic response gene after exposure to a known
CC toxic pharmaceutical or industrial agent; and (c) comparing the test
CC profile to the expression profile of a gene with a similar function or
CC comparing the test profile to the expression profile of that gene after
CC exposure to other known toxic compounds. The methods are useful for
CC predicting and determining toxicological responses on a cellular, organ
CC or system level. The arrays comprising the human genes are useful for
CC toxicological screening of drugs, pharmaceutical compounds and chemicals
XX
SQ Sequence 23 BP; 3 A; 10 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 23;
Best Local Similarity 94.4%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 251 TGGACAAGAAGCTGCTGG 268
||||||||| ||||||||
Db 19 TGGACAAGAGGCTGCTGG 2

RESULT 913
ADO58024
ID ADO58024 standard; DNA; 23 BP.
XX
AC ADO58024;
XX
DT 12-AUG-2004 (first entry)
XX
DE B cell VH/VL region cloning half nested PCR primer, HUVHBACK5.
XX
KW B cell; surface immunoglobulin; Ig; binding site; antigen; human CD28;
KW closed system; detection laser-beam; catcher tube;
KW electrochemical device; fluorescence activated cell sorter; FACS;
KW antibody variable region; primer; ss; human.
XX
OS Homo sapiens.
XX
PN WO2004044584-A1.
XX
PD 27-MAY-2004.
XX
PF 12-NOV-2003; 2003WO-EP012664.
XX
PR 13-NOV-2002; 2002EP-00025335.
XX
PA (MICR-) MICROMET AG.
XX
PI Baeuerle P, Hoffmann P, Weinberger S, Kischel R;
XX
DR WPI; 2004-449579/42.
XX
PT Identifying a B cell carrying a surface immunoglobulin molecule having a
PT binding site for an antigen of interest, useful for constructing
PT therapeutic antibodies, comprises contacting a sample with the antigen
PT and a receptor.
XX
PS Example 5; SEQ ID NO 24; 156pp; English.
XX
CC The invention relates to a novel method for identifying a B cell carrying
CC a surface immunoglobulin (Ig) molecule having a binding site for an
CC antigen of interest. The method comprises contacting a sample putatively
CC containing the B cell with the antigen of interest and with a receptor
CC specifically binding to the Ig molecule, and assessing the presence of
CC the detectable signal. The invention further comprises: an antibody
CC generated by the method above which is specific for human CD28 or
CC comprising an amino acid(s) sequence(s) given in the specification,
CC and/or are encoded by a nucleic acid sequence(s) also given in the
CC specification; and a device for assessing the presence of a detectable
CC signal defined above, where the device comprises a closed system for the
CC detection laser-beam and a catcher tube, and where the B cell of interest
CC can be collected as a single cell by means of an electrochemical device,
CC which is triggered by an electric signal generated by the fluorescence
CC activated cell sorter (FACS) device, where the electrochemical device
CC moves the nozzle of the steady catcher tube liquid stream for a
CC programmed time over a collecting tube, microtiter plate or other
CC container after a B cell is sorted. The method is useful for identifying
CC a B cell carrying a surface Ig molecule having a binding site for an
CC antigen of interest. The method is also useful for cloning of antibody
CC variable regions from the identified B cells, which may subsequently be
CC employed in the construction of proteins such as antibodies or its
CC fragments or derivatives useful in therapeutic approaches. The method is
CC useful as an alternative to phage display for the gain of antibodies or
CC its fragments. This polynucleotide sequence represents a primer used in
CC the exemplification of the invention.
XX
SQ Sequence 23 BP; 3 A; 3 C; 10 G; 5 T; 0 U; 2 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 23;
Best Local Similarity 77.3%; Pred. No. 1.3e+03;
Matches 17; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 853 GAGGAGGAGCTGGTGGAGGCTG 874
:||| | |||||||||| |||
Db 1 SAGGTGCAGCTGGTGGARTCTG 22

RESULT 914
ADO58025
ID ADO58025 standard; DNA; 23 BP.
XX
AC ADO58025;
XX
DT 12-AUG-2004 (first entry)
XX
DE B cell VH/VL region cloning half nested PCR primer, HUVHBACK6.
XX
KW B cell; surface immunoglobulin; Ig; binding site; antigen; human CD28;
KW closed system; detection laser-beam; catcher tube;
KW electrochemical device; fluorescence activated cell sorter; FACS;
KW antibody variable region; primer; ss; human.
XX
OS Homo sapiens.
XX
PN WO2004044584-A1.
XX
PD 27-MAY-2004.
XX
PF 12-NOV-2003; 2003WO-EP012664.
XX
PR 13-NOV-2002; 2002EP-00025335.
XX
PA (MICR-) MICROMET AG.
XX
PI Baeuerle P, Hoffmann P, Weinberger S, Kischel R;
XX
DR WPI; 2004-449579/42.
XX
PT Identifying a B cell carrying a surface immunoglobulin molecule having a
PT binding site for an antigen of interest, useful for constructing
PT therapeutic antibodies, comprises contacting a sample with the antigen
PT and a receptor.
XX
PS Example 5; SEQ ID NO 25; 156pp; English.
XX
CC The invention relates to a novel method for identifying a B cell carrying
CC a surface immunoglobulin (Ig) molecule having a binding site for an
CC antigen of interest. The method comprises contacting a sample putatively
CC containing the B cell with the antigen of interest and with a receptor
CC specifically binding to the Ig molecule, and assessing the presence of
CC the detectable signal. The invention further comprises: an antibody
CC generated by the method above which is specific for human CD28 or
CC comprising an amino acid(s) sequence(s) given in the specification,
CC and/or are encoded by a nucleic acid sequence(s) also given in the
CC specification; and a device for assessing the presence of a detectable
CC signal defined above, where the device comprises a closed system for the
CC detection laser-beam and a catcher tube, and where the B cell of interest

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CC   can be collected as a single cell by means of an electrochemical device,
CC   which is triggered by an electric signal generated by the fluorescence
CC   activated cell sorter (FACS) device, where the electrochemical device
CC   moves the nozzle of the steady catcher tube liquid stream for a
CC   programmed time over a collecting tube, microtiter plate or other
CC   container after a B cell is sorted. The method is useful for identifying
CC   a B cell carrying a surface Ig molecule having a binding site for an
CC   antigen of interest. The method is also useful for cloning of antibody
CC   variable regions from the identified B cells, which may subsequently be
CC   employed in the construction of proteins such as antibodies or its
CC   fragments or derivatives useful in therapeutic approaches. The method is
CC   useful as an alternative to phage display for the gain of antibodies or
CC   its fragments. This polynucleotide sequence represents a primer used in
CC   the exemplification of the invention.
XX
SQ   Sequence 23 BP; 3 A; 3 C; 11 G; 3 T; 0 U; 3 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 23;
  Best Local Similarity   77.3%;  Pred. No. 1.3e+03;
  Matches   17;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCTG 874
              |||| | |||||:||||| |:|
Db          1 GAGGTGCAGCTGKTGGAGWCYG 22


RESULT 915
AAQ27544
ID   AAQ27544 standard; DNA; 21 BP.
XX
AC   AAQ27544;
XX
DT   29-JAN-1993  (first entry)
XX
DE   PCR Primer T1 corresponds to TKF receptor nts. 619-639.
XX
KW   TKF; tumour diagnosis; polymerase chain reaction; anchor PCR;
KW   fibroblast growth factor; human; Tyrosine Kinase receptor; ss.
XX
OS   Synthetic.
XX
PN   DE4104240-A.
XX
PD   13-AUG-1992.
XX
PF   12-FEB-1991;   91DE-04104240.
XX
PR   12-FEB-1991;   91DE-04104240.
XX
PA   (GEOR-) GEORG-SPEYER-HAUS CHEMOTHERAPEUTISCHES.
XX
PI   Holtrich U,  Braeuninger A,  Strebhardt K,  Ruebsamen-Waigmann H;
XX
DR   WPI; 1992-277527/34.
XX
PT   New tyrosine kinase receptor protein related to FGF receptor proteins -
PT   and corresponding DNA sequences, used in treatment and diagnosis of lung
PT   tumours.
XX
PS   Example 3; Page 11; 12pp; German.
XX
CC   Primer T1 was used with primer P6(2) (see AAQ27540) to PCR-amplify a
CC   probe suitable for screening a human lung tissue cDNA library for
CC   identifying a TKF receptor clone. See also AAQ27539-Q27543
XX
SQ   Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1603 TCCCAGAAGTGCATCCACAGG 1623
              |||| |||||| |||||| ||
Db          1 TCCCGGAAGTGTATCCACCGG 21


RESULT 916
AAT63277
ID   AAT63277 standard; DNA; 21 BP.
XX
AC   AAT63277;
XX
DT   21-MAY-1997  (first entry)
XX
DE   HGF receptor gene upstream primer binds bases 3993-4013.
XX
KW   Cornea; proliferation; in vivo; hepatocyte growth factor; injury; PCR;
KW   keratinocyte growth factor; ocular surgery; epithelium; endothelium;
KW   expression; receptor; polymerase chain reaction; amplification; primer;
KW   healing; beta-actin; upstream; downstream; intron; ss.
XX
OS   Synthetic.
XX
PN   US5589451-A.
XX
PD   31-DEC-1996.
XX
PF   21-SEP-1992;   92US-00947683.
XX
PR   21-SEP-1992;   92US-00947683.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Wilson SE;
XX
DR   WPI; 1997-076878/07.
XX
PT   Promoting or suppressing corneal cell proliferation - using hepatocyte
PT   growth factor or calcium ions resp., e.g. for treating corneal injury or
PT   for preserving corneal tissue prior to transplantation.
XX
PS   Example 1; Col 11-12; 25pp; English.
XX
CC   The invention relates to methods for promoting corneal cell proliferation
CC   in vivo by treating the cells with hepatocyte growth factor (HGF) and
CC   optionally keratinocyte growth factor (KGF). Methods for suppressing
CC   corneal cell growth include administering Ca ions to the cells. The
CC   methods are used for the treatment of corneal tissue injury following
CC   accidental injury, ocular surgery or due to corneal disorders caused by
CC   abnormal healing processes of the corneal epithelium and endothelium. The
CC   methods are based on the discovery that corneal tissue can express mRNA
CC   for HGF, KGF and their respective receptors. The discovery was shown by
CC   PCR amplification using the primers AAT63273-87. Primers AAT63277-8 were
CC   used to amplify a 342 bp fragment of the HGF receptor cDNA. This primer
CC   is the upstream amplification primer and corresponds to bases 3993-4013
CC   of the HGF receptor gene. The amplified fragment was detected using probe
CC   AAT63279
XX
SQ   Sequence 21 BP; 0 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1807 TGGTCCTTTGGGGTCCTGCTC 1827
              |||||||||| ||| | |||
Db          1 TGGTCCTTTGGCGTCGTCCTC 21


RESULT 917
AAT62925
ID   AAT62925 standard; DNA; 21 BP.
XX
AC   AAT62925;
XX
DT   09-JAN-1998  (first entry)
```

```
XX
DE   Neoplastic disease protein upstream PCR primer.
XX
KW   Liver neoplastic disease; cirrhosis; hepatocellular carcinoma;
KW   adenomatous hyperplasia; adenoma; liver; PCR; primer; ss;
KW   polymerase chain reaction.
XX
OS   Synthetic.
XX
PN   WO9711968-A2.
XX
PD   03-APR-1997.
XX
PF   10-SEP-1996;   96WO-US014487.
XX
PR   27-SEP-1995;   95US-00533996.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Demetriou AA,  Ljubimova JY;
XX
DR   WPI; 1997-212852/19.
XX
PT   New marker gene for liver neoplastic disease - used for developing
PT   products for the diagnosis and therapy of diseases such as liver
PT   cirrhosis and hepatocellular carcinoma.
XX
PS   Example 3; Page 27; 34pp; English.
XX
CC   This PCR primer was used to amplify reverse transcribed cDNA which
CC   encodes a protein that is associated with liver neoplastic diseases, such
CC   as cirrhosis and hepatocellular carcinoma. This cDNA was obtained by
CC   reverse transcription of mRNA extracted from liver samples obtained from
CC   liver biopsy patients. The protein is not found in normal non-neoplastic
CC   livers, and its presence can therefore be used for diagnostic purposes.
CC   Antibodies to this protein have been produced and are expected to have
CC   some use in diagnosis, by detecting the presence or absence of the
CC   protein using, e.g ELISA assays. The antibodies may also be used in the
CC   prevention and treatment of liver neoplastic diseases. The invention also
CC   includes antisense oligonucleotides, and DNA sequences encoding antisense
CC   oligonucleotides. These components may help in the treatment of liver
CC   neoplastic diseases, by inhibiting disease development
XX
SQ   Sequence 21 BP; 0 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1807 TGGTCCTTTGGGGTCCTGCTC 1827
              ||||||||||| ||| | |||
Db          1 TGGTCCTTTGGCGTCGTCCTC 21


RESULT 918
AAV05489
ID   AAV05489 standard; DNA; 21 BP.
XX
AC   AAV05489;
XX
DT   01-MAY-1998  (first entry)
XX
DE   Upstream primer for HGF receptor DNA.
XX
KW   Inhibition; corneal epithelial cell; differentiation; treatment;
KW   hepatocyte growth factor; HGF; keratinocyte growth factor; KGF; dry eye;
KW   keratoconjunctivitis sicca; PCR primer; receptor; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5703047-A.
XX
PD   30-DEC-1997.
XX
PF   09-MAR-1995;   95US-00400323.
XX
PR   21-SEP-1992;   92US-00947683.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Wilson SE;
XX
DR   WPI; 1998-076459/07.
XX
PT   Inhibition of corneal cell differentiation - by using hepatocyte growth
PT   factor and/or keratinocyte growth factor.
XX
PS   Example 1; Col 17-18; 36pp; English.
XX
CC   The present sequence was used in the development of a novel method for
CC   the inhibition of corneal epithelial cell differentiation. The method
CC   comprises contacting the cells with a hepatocyte growth factor (HGF)
CC   and/or keratinocyte growth factor (KGF). When HGF and KGF are both used,
CC   the cells can be contacted with them sequentially or simultaneously. The
CC   HGF and/or KGF is in a timed release delivery system, especially
CC   comprising biodegradable polymer microcapsules. The HGF and/or KGF are
CC   administered topically. The method is used for treating dry eye,
CC   especially keratoconjunctivitis sicca
XX
SQ   Sequence 21 BP; 0 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1807 TGGTCCTTTGGGGTCCTGCTC 1827
              ||||||||||| ||| | |||
Db          1 TGGTCCTTTGGCGTCGTCCTC 21


RESULT 919
AAV64914/c
ID   AAV64914 standard; DNA; 21 BP.
XX
AC   AAV64914;
XX
DT   15-MAR-1999  (first entry)
XX
DE   HSV-1 primer Exon 2n.
XX
KW   HSV-1; latency associated transcript; LAT; LATin;
KW   gene transcript stabilisation; gene expression; gene therapy; PCR;
KW   primer; ss.
XX
OS   Synthetic.
OS   Human herpesvirus 1.
XX
PN   WO9848004-A1.
XX
PD   29-OCT-1998.
XX
PF   17-APR-1998;   98WO-US007691.
XX
PR   18-APR-1997;   97US-0044664P.
XX
PA   (WIST-) WISTAR INST ANATOMY & BIOLOGY.
XX
PI   Fraser NW,  Zabolotny JM,  Krummenacher CF;
XX
DR   WPI; 1998-609982/51.
XX
PT   Increasing expression of genes having unstable RNA transcripts,
PT   particularly for gene therapy - using a construct including gene flanked
PT   by intron fragments that include a hairpin next to the intron
PT   branchpoint.
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```
XX
PS   Example 1; Page 23; 106pp; English.
XX
CC   This is the nucleotide sequence of primer Exon 2n, which was used with
CC   primer Exon 1 (see AAV64912) in RT-PCR to characterise the splice
CC   junctions of the latency associated transcript (LAT) of herpes simplex
CC   virus type 1 (see AAV64883-86). The invention relates to methods of
CC   stabilising unstable gene transcripts. A claimed polynucleotide
CC   comprises: a polynucleotide encoding a gene product; a 5'-sequence of an
CC   intron, including the splice donor and splice acceptor sites (see
CC   AAV64885-86), and a 3'-sequence of the same intron, including a hairpin
CC   structure (see AAV64887) next to the intron's branchpoint. A preferred
CC   intron is the 2.0 kb LAT of a herpes virus. Methods and compositions
CC   using the polynucleotide can be used in gene therapy and more generally
CC   as research reagents, markers of gene production, in therapeutic or
CC   diagnostic compositions, in drug screening and to identify transcripts
CC   produced only at selected stages of the cell cycle
XX
SQ   Sequence 21 BP; 0 A; 11 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        183 CGGGGAGGACGAGGCTGAGGA 203
              || |||||| ||||| |||||
Db         21 CGAGGAGGAAGAGGCAGAGGA 1


RESULT 920
AAX01222
ID   AAX01222 standard; DNA; 21 BP.
XX
AC   AAX01222;
XX
DT   31-MAR-1999  (first entry)
XX
DE   Primer for antiFc epsilon RI alpha chain antibody coding sequence.
XX
KW   AntiFc epsilon RI alpha chain antibody; antibody production; human;
KW   PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   JP11000174-A.
XX
PD   06-JAN-1999.
XX
PF   13-JUN-1997;   97JP-00171232.
XX
PR   13-JUN-1997;   97JP-00171232.
XX
PA   (ASAK ) ASAHI BREWERIES LTD.
PA   (TORI ) TORII YAKUHIN KK.
PA   (NIKK-) NIKKA WHISKEY KK.
PA   (TSUR/) TSURA T.
XX
DR   WPI; 1999-124394/11.
XX
PT   Preparing an antibody Fab fragment using yeast - in high yield.
XX
PS   Example 2; Page 4; 13pp; Japanese.
XX
CC   This sequence represents a PCR primer for DNA encoding a human antiFc
CC   epsilon RI alpha chain antibody, produced using the method of the
CC   invention. The method is for preparing an antibody Fab fragment using the
CC   yeast Pichia pastoris as the host cell. The method can prepare an
CC   antibody Fab fragment cost efficiently and in high yield
XX
SQ   Sequence 21 BP; 3 A; 3 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        853 GAGGAGGAGCTGGTGGAGGCT 873
              |||| | |||||||||| ||
Db          1 GAGGTGCAGCTGGTGGAGTCT 21


RESULT 921
AAX81822
ID   AAX81822 standard; DNA; 21 BP.
XX
AC   AAX81822;
XX
DT   02-SEP-1999  (first entry)
XX
DE   PCR primer used to amplify cDNA sequences isolated from liver tissue.
XX
KW   Liver neoplastic disease; malignancy-associated gene; MAG; liver disease;
KW   neoplastic disease; cirrhosis; hepatocellular carcinoma; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO9929859-A1.
XX
PD   17-JUN-1999.
XX
PF   11-DEC-1998;   98WO-US026461.
XX
PR   12-DEC-1997;   97US-00989750.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Black K,  Ljubimova JY,  Demetriou AA;
XX
DR   WPI; 1999-404942/34.
XX
PT   Liver-associated malignancy-associated gene (MAG), useful for screening
PT   for cirrhosis and hepatocellular carcinoma.
XX
PS   Example 3; Page 13; 42pp; English.
XX
CC   The specification describes a liver neoplastic disease polynucleotide and
CC   malignancy-associated gene (MAG) proteins. The polypeptide is useful for
CC   detecting antibodies associated with liver disease. Probes derived from
CC   the MAG gene are useful for detecting the presence of sequences
CC   associated with neoplastic disease, e.g. liver diseases such as cirrhosis
CC   and hepatocellular carcinoma, and therefore can be used in disease
CC   diagnosis. The sequences can be used for development of therapeutics that
CC   are useful for inhibition of the development of neoplastic liver disease.
CC   PCR primers AAX81822-23 were used in the course of the invention
XX
SQ   Sequence 21 BP; 0 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1807 TGGTCCTTTGGGGTCCTGCTC 1827
              |||||||||| ||| | |||
Db          1 TGGTCCTTTGGCGTCGTCCTC 21


RESULT 922
AAZ57190/c
ID   AAZ57190 standard; DNA; 21 BP.
XX
AC   AAZ57190;
XX
DT   03-APR-2000  (first entry)
XX
DE   Mouse insulin PCR primer Ins13 SEQ ID NO:4.
XX
```

KW Human; activin A; Pax4 gene; expression; potentiator; insulin;
KW pancreatic beta cell; diabetes; PCR primer; ss.
XX
OS Mus sp.
XX
PN WO9966073-A1.
XX
PD 23-DEC-1999.
XX
PF 15-JUN-1999; 99WO-JP003182.
XX
PR 16-JUN-1998; 98JP-00167976.
XX
PA (YAMA) YAMANOUCHI PHARM CO LTD.
XX
PI Ueda Y;
XX
DR WPI; 2000-097752/08.
XX
PT Screening potential Pax4 gene potentiators, used in treatment of, e.g.
PT diabetes.
XX
PS Disclosure; Page 17; 38pp; Japanese.
XX
CC The present invention describes the a method for screening potential
CC inhibitors of the expression of the Pax4 gene by contacting the potential
CC inhibitor with pancreatic beta cells and measuring the expression of the
CC gene in these cells is new. Substances identified by the screening method
CC potentiate the expression of the Pax4 gene in pancreatic beta cells and
CC accelerate the expression of insulin gene in those cells. The method can
CC be used in the treatment of disorders in which the exhaustion of
CC pancreatic beta cells is involved, such as diabetes. The present sequence
CC represents a PCR primer which is used in the exemplification of the
CC present invention
XX
SQ Sequence 21 BP; 2 A; 6 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1608 GAAGTGCATCCACAGGGACCT 1628
|||| |||||||||||| | |
Db 21 GAAGCGCATCCACAGGGCCAT 1

RESULT 923
ADC78624/c
ID ADC78624 standard; DNA; 21 BP.
XX
AC ADC78624;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human PRO protein-related reverse PCR primer SEQ ID 312.
XX
KW antiinflamatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian;
KW nootropic; neuroprotective; vasotropic; chemotaxic; angiogenic;
KW neurotrophic; osteopathic; antiasthmatic; antiarthritic; antirheumatic;
KW antiarteriosclerotic; cardiant; antidiabetic; cerebroprotective;
KW thrombolytic; immunomodulator; enterocolitis; Zollinger-Ellison syndrome;
KW gastrointestinal ulceration; psoriasis; cancer; Parkinson's disease;
KW Alzheimer's; ALS; neuropathy; dermal scarring; wound healing;
KW nerve repair; thrombosis; bone; cartilage formation; angiogenesis;
KW asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disorder;
KW atherosclerosis; cardiac injury; infertility; premature aging; AIDS;
KW diabetes; stroke; gene therapy; transgenic; PRO; human; ss; primer; PCR.
XX
OS Homo sapiens.
XX
PN WO200015796-A2.
XX
PD 23-MAR-2000.
XX
PF 15-SEP-1999; 99WO-US021090.
XX
PR 16-SEP-1998; 98WO-US019330.
XX
PA (GETH) GENENTECH INC.
XX
PI Chen J, Goddard A, Gurney AL, Hillan K, Pennica D, Wood WI;
PI Yuan J;
XX
DR WPI; 2000-271434/23.
XX
PT Novel nucleic acids encoding secreted and transmembrane polypeptides with
PT homology, e.g. to growth and cancer-associated antigens.
XX
PS Example 44; SEQ ID NO 312; 355pp; English.
XX
CC The invention relates to a novel nucleic acid encoding a PRO polypeptide.
CC The polypeptides and polynucleotides of the invention may be useful as
CC research tools and as therapeutics for treating enterocolitis, Zollinger-
CC Ellison syndrome, gastrointestinal ulceration, psoriasis, cancer,
CC Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal
CC scarring and wound healing, nerve repair, thrombosis, bone and/or
CC cartilage formation, angiogenesis, asthma, rheumatoid arthritis, multiple
CC sclerosis, inflammatory disorders, atherosclerosis, cardiac injury,
CC infertility, premature aging, AIDS, diabetes complications and stroke.
CC The molecules may also be utilised during gene therapy procedures and
CC transgenic animal production. The current sequence is that of the PCR
CC primer of the invention which was used to analyse the human PRO DNA of
CC the invention.
XX
SQ Sequence 21 BP; 4 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1254 CATTGACAAGGACCGGGCCGC 1274
|||| |||||||| ||||||
Db 21 CATTTCCAAGGACCTGGCCGC 1

RESULT 924
ABX09458/c
ID ABX09458 standard; DNA; 21 BP.
XX
AC ABX09458;
XX
DT 22-JAN-2003 (first entry)
XX
DE Arteriosclerosis-detecting probe from HNF1 #4.
XX
KW Arteriosclerosis; diagnosis; hybridisation; synergism; gene therapy;
KW mutation; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200272882-A2.
XX
PD 19-SEP-2002.
XX
PF 13-MAR-2002; 2002WO-EP002780.
XX
PR 13-MAR-2001; 2001DE-01011925.
XX
PA (OGHA-) OGHAM GMBH.
XX
PI Cullen P, Seedorf U;
XX
DR WPI; 2002-723374/78.
XX
PT Determining genetic risk of arteriosclerosis, for clinical diagnosis,
PT comprises hybridizing patient nucleic acid with an array of probes

PT derived from risk-associated reference genes and their mutations.
XX
PS Example 1; Page 126; 146pp; German.
XX
CC This invention describes a novel method for determining the genetic risk
CC of arteriosclerosis both for clinical diagnosis and for population
CC studies. The method comprises: (i) selecting risk-associated reference
CC nucleic acid sequences, including their functionally characterizing
CC mutations; (ii) applying probes from these sequences, or their
CC complements, to a carrier; (iii) hybridising the probes with a nucleic
CC acid from (or synthesised from) a patient sample; and (iv) detecting and
CC evaluating the hybridisation pattern. The method provides a quick,
CC inexpensive and informative diagnosis, and makes possible a
CC multifactorial analysis for detecting e.g. synergism between different
CC mutations or mutations that when present alone carry no risk but are risk
CC -associated in presence of other mutations. The results may be combined
CC with known risk-assessment methods to provide a more reliable diagnosis,
CC especially important with new therapeutic methods (e.g. gene therapy)
CC that are directed against specific genes. All relevant mutations in a
CC reference sequence can be screened for in a single test and the method is
CC well suited to automation. ABX09147-ABX09676 represent probes used to
CC illustrate the method of the invention
XX
SQ Sequence 21 BP; 2 A; 13 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       2907 CAGGCATGGCCCTGGGCGGGG 2927
              | ||| |||||||||| ||||
Db         21 CGGGCCTGGCCCTGGGGGGGG 1
```

RESULT 925
ACA60810
ID ACA60810 standard; DNA; 21 BP.
XX
AC ACA60810;
XX
DT 01-JUL-2003 (first entry)
XX
DE Hamster anti-CD3 epsilon antibody 145-2C11 PCR primer number 7.
XX
KW Antibody; PD-1; J43; immunopathy; neurodegenerative disease;
KW Parkinson's disease; Parkinson's syndrome; Huntington's disease;
KW Machado-Joseph disease; amyotrophic lateral sclerosis; ss; PCR; primer;
KW Creutzfeldt-Jakob disease; autoimmune disease; glomerulonephritis;
KW arthritis; myocardiopathy-like disease; ulcerative colitis;
KW Sjogren's syndrome; Crohn's disease; systemic erythematosus;
KW multiple myosititis; skin toughening; rheumatic fever; CD3; 145-2C11;
KW insulin-dependent diabetes; Behcet's disease; Hashimoto disease;
KW periarteritis nodosa; leukoderm vulgaris; Armenian hamster.
XX
OS Cricetulus migratorius.
XX
PN WO2003011911-A1.
XX
PD 13-FEB-2003.
XX
PF 30-JUL-2002; 2002WO-JP007735.
XX
PR 31-JUL-2001; 2001JP-00232303.
XX
PA (ONOY) ONO PHARM CO LTD.
PA (HONJ/) HONJO T.
XX
PI Honjo T, Shibayama S, Matsuo M, Yoshida T;
XX
DR WPI; 2003-248150/24.
XX
PT Substance specific to PD-1, selectively recognizing PD-1 and a related
PT cell membrane protein, applicable in developing remedies or preventives
PT for diseases caused by immunopathy e.g. autoimmune diseases.
XX
PS Example 7; Page 32; 73pp; Japanese.
XX
CC The invention relates to a substance comprising a substance recognising
CC PD-1 (not defined), a substance recognising a membrane protein present in
CC the cell membrane where PD-1 is expressed, and a linker. Also included is
CC a drug composition containing an effective dose of a remedy and/or
CC preventive for PD-1 related diseases namely immunopathy, e.g.
CC neurodegenerative diseases including Parkinson's disease, Parkinson's
CC syndrome, Huntington's disease, Machado-Joseph disease, amyotrophic
CC lateral sclerosis, and Creutzfeldt-Jakob disease, and autoimmune
CC diseases, e.g. glomerulonephritis, arthritis, myocardiopathy-like
CC diseases, ulcerative colitis, Sjogren's syndrome, Crohn's disease,
CC systemic erythematosus, multiple myosititis, skin toughening, rheumatic
CC fever, insulin-dependent diabetes, Behcet's disease, Hashimoto disease,
CC periarteritis nodosa, and leukoderm vulgaris. A chimaeric protein of the
CC invention was created comprising the light and heavy chains of the mouse
CC anti-PD-1 antibody and the Armenian hamster anti-mouse CD3 (not defined)
CC epsilon antibody 145-2C11. The present sequence is a PCR primer used to
CC amplify the hamster 145-2C11 cDNA sequence
XX
SQ Sequence 21 BP; 3 A; 3 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        853 GAGGAGGAGCTGGTGGAGGCT 873
              |||| | |||||||||||| ||
Db          1 GAGGTGCAGCTGGTGGAGTCT 21
```

RESULT 926
ADI00328/c
ID ADI00328 standard; DNA; 21 BP.
XX
AC ADI00328;
XX
DT 22-APR-2004 (first entry)
XX
DE PCR primer SEQ ID 108 used to amplify human PKD-1 exon 15L DNA.
XX
KW mutation analysis; PKD; polycystic kidney disease; human; PKD-1; ss; PCR;
KW primer.
XX
OS Homo sapiens.
XX
PN US2003152936-A1.
XX
PD 14-AUG-2003.
XX
PF 26-FEB-2002; 2002US-00083246..
XX
PR 12-OCT-2001; 2001US-0328739P.
XX
PA (ATHE-) ATHENA DIAGNOSTICS INC.
XX
PI Jones JG, Hennigan AN, Curran JA, Allen SK, Robichaud NJ, Wang J;
PI Flynn KE, Garces JA, Palatucci CM;
XX
DR WPI; 2003-897708/82.
XX
PT Analyzing mutations of a target nucleic acid by detecting heteroduplexes
PT from generated duplexes, useful for diagnosing patients affected with
PT polycystic kidney disease.
XX
PS Disclosure; SEQ ID NO 108; 126pp; English.
XX
CC The invention relates to a novel method of mutation analysis of a target
CC nucleic acid which comprises incubating a sample having the target
CC nucleic acid in a reaction mixture, in the presence of at least one first
CC and second nucleic acid, where incubation produces amplified products,

```
CC   generating duplexes in the amplified products and detecting the presence
CC   or absence of a heteroduplex from the duplexes, where its presence
CC   indicates a potential mutation in the target nucleic acid and its absence
CC   indicates the absence of mutation in the target nucleic acid. The method
CC   and compositions of the invention may be useful for analysing mutation
CC   and diagnosing patients affected with PKD (polycystic kidney disease).
CC   The current sequence is that of a PCR primer of the invention which was
CC   used to amplify human polycystic kidney disease PKD-1 DNA.
XX
SQ   Sequence 21 BP; 4 A; 5 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2239 CACCCTGCTGCTGGTGCACAG 2259
              |||| |||||||||  |||||
Db         21 CACCTTGCTGCTGGCCCACAG 1


RESULT 927
ADH47876
ID   ADH47876 standard; DNA; 21 BP.
XX
AC   ADH47876;
XX
DT   25-MAR-2004  (first entry)
XX
DE   PCR primer for human Ig VH3 DNA framework region 1 (FR1).
XX
KW   Ig-unmutated; chronic lymphocytic leukaemia; CLL;
KW   small lymphocytic lymphoma; SLL; ZAP-70; cytostatic; human; Ig VH;
KW   framework region 1; FR1; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2003203416-A1.
XX
PD   30-OCT-2003.
XX
PF   03-DEC-2002; 2002US-00309548.
XX
PR   25-APR-2002; 2002US-0375966P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Staudt LM,  Rosenwald A,  Wilson W,  Barry TS,  Wiestner A;
XX
DR   WPI; 2004-141578/14.
XX
PT   Detecting Ig-unmutated chronic lymphocytic leukemia in a subject involves
PT   determining over expression of ZAP-70 molecule in a subject.
XX
PS   Example 2; Page 13; 32pp; English.
XX
CC   The present invention relates to a method of detecting Ig-unmutated
CC   chronic lymphocytic leukaemia (CLL)/small lymphocytic lymphoma (SLL) in a
CC   subject. The method involves determining whether the subject
CC   overexpresses ZAP-70, which is used as a marker for CLL/SLL. Also
CC   disclosed is a kit for detecting overexpression of ZAP-70 in a subject,
CC   preferably human. The present sequence represents a PCR primer used in
CC   the examples of the present invention.
XX
SQ   Sequence 21 BP; 3 A; 3 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        854 AGGAGGAGCTGGTGGAGGCTG 874
              ||| | ||||||||||| |||
Db          1 AGGTGCAGCTGGTGGAGTCTG 21


RESULT 928
ADJ97642
ID   ADJ97642 standard; DNA; 21 BP.
XX
AC   ADJ97642;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 415.
XX
KW   human; ss; short interfering RNA; siRNA; angiogenesis;
KW   vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
KW   Flk-1/KDR; kinase domain region; diabetic retinopathy;
KW   age-related macular degeneration; inflammatory disease; psoriasis;
KW   rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour;
KW   lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
KW   antipsoriatic; antirheumatic; antiarthritic.
XX
OS   Homo sapiens.
XX
PN   WO2004009769-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022444.
XX
PR   24-JUL-2002; 2002US-0398417P.
PR   14-NOV-2002; 2002US-00294228.
XX
PA   (UYPE-) UNIV PENNSYLVANIA.
XX
PI   Tolentino MJ,  Reich SJ;
XX
DR   WPI; 2004-203472/19.
XX
PT   Novel short interfering RNA (siRNA) comprises sense and antisense RNA
PT   strands, useful for inhibiting expression of human vascular endothelial
PT   growth factor mRNA, for treating angiogenic disease, e.g. diabetic
PT   retinopathy and cancer.
XX
PS   Disclosure; SEQ ID NO 415; 218pp; English.
XX
CC   This invention relates to novel compositions that comprise short
CC   interfering RNA (siRNA) molecules, which can be used to inhibit
CC   angiogenesis. Specifically, it refers to siRNAs that target and cause
CC   RNAi-induced degradation of mRNA from human vascular endothelial growth
CC   factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
CC   region) genes, as well as mutants derived thereof. The present invention
CC   describes sense and antisense RNA strands that form an RNA duplex and
CC   bind to the target mRNA, such that expression is inhibited and the target
CC   degraded. As such, siRNA administered in combination with a therapeutic
CC   agent is useful for treating diseases associated with angiogenesis and
CC   the overexpression of VEGF, which include diabetic retinopathy, age-
CC   related macular degeneration, inflammatory disease, psoriasis and
CC   rheumatoid arthritis. Furthermore, it can be used to treat various
CC   cancers including breast, retinoblastoma, Wilm's tumour and lymphoma.
CC   Accordingly, these compositions exhibit cytostatic, antidiabetic,
CC   ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
CC   antiarthritic activities. This oligonucleotide is a human Flt-1 DNA
CC   oligo, a target for siRNA inhibition of the invention.
XX
SQ   Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1609 AAGTGCATCCACAGGGACCTG 1629
              |||||||  ||  ||||||||
Db          1 AAGTGCATTCATCGGGACCTG 21
```

```
RESULT 929
ADJ97640
ID   ADJ97640 standard; DNA; 21 BP.
XX
AC   ADJ97640;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 413.
XX
KW   human; ss; short interfering RNA; siRNA; angiogenesis;
KW   vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
KW   Flk-1/KDR; kinase domain region; diabetic retinopathy;
KW   age-related macular degeneration; inflammatory disease; psoriasis;
KW   rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour;
KW   lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
KW   antipsoriatic; antirheumatic; antiarthritic.
XX
OS   Homo sapiens.
XX
PN   WO2004009769-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022444.
XX
PR   24-JUL-2002; 2002US-0398417P.
PR   14-NOV-2002; 2002US-00294228.
XX
PA   (UYPE-) UNIV PENNSYLVANIA.
XX
PI   Tolentino MJ,  Reich SJ;
XX
DR   WPI; 2004-203472/19.
XX
PT   Novel short interfering RNA (siRNA) comprises sense and antisense RNA
PT   strands, useful for inhibiting expression of human vascular endothelial
PT   growth factor mRNA, for treating angiogenic disease, e.g. diabetic
PT   retinopathy and cancer.
XX
PS   Disclosure; SEQ ID NO 413; 218pp; English.
XX
CC   This invention relates to novel compositions that comprise short
CC   interfering RNA (siRNA) molecules, which can be used to inhibit
CC   angiogenesis. Specifically, it refers to siRNAs that target and cause
CC   RNAi-induced degradation of mRNA from human vascular endothelial growth
CC   factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
CC   region) genes, as well as mutants derived thereof. The present invention
CC   describes sense and antisense RNA strands that form an RNA duplex and
CC   bind to the target mRNA, such that expression is inhibited and the target
CC   degraded. As such, siRNA administered in combination with a therapeutic
CC   agent is useful for treating diseases associated with angiogenesis and
CC   the overexpression of VEGF, which include diabetic retinopathy, age-
CC   related macular degeneration, inflammatory disease, psoriasis and
CC   rheumatoid arthritis. Furthermore, it can be used to treat various
CC   cancers including breast, retinoblastoma, Wilm's tumour and lymphoma.
CC   Accordingly, these compositions exhibit cytostatic, antidiabetic,
CC   ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
CC   antiarthritic activities. This oligonucleotide is a human Flt-1 DNA
CC   oligo, a target for siRNA inhibition of the invention.
XX
SQ   Sequence 21 BP; 6 A; 3 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1574 AGGTGGCCCGGGGCATGGAGT 1594
              | |||||| | ||||||||||
Db          1 AAGTGGCCAGAGGCATGGAGT 21


RESULT 930
ADL61633/c
ID   ADL61633 standard; RNA; 21 BP.
XX
AC   ADL61633;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Antisense RNAi DNA-RNA hybrid oligo 2 targeted to human ephA2-4.
XX
KW   predictor set; protein tyrosine kinase biomarker; cytostatic;
KW   antiangiogenic; vasotropic; vulnerary; pharmacogenomic; drug sensitivity;
KW   breast cancer; hypervascular disease; angiogenesis; wound healing scar;
KW   human; ss; antisense; RNAi; interfering RNA; DNA-RNA hybrid; ephA2-4.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    20. .21
FT                   /*tag=  a
FT                   /note= "Deoxyribonucleotide (thymine)"
XX
PN   WO2004020583-A2.
XX
PD   11-MAR-2004.
XX
PF   26-AUG-2003; 2003WO-US026491.
XX
PR   27-AUG-2002; 2002US-0406385P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Huang F,  Han X,  Reeves KA,  Amler L,  Fairchild CR,  Lee FY;
PI   Shaw P;
XX
DR   WPI; 2004-239171/22.
XX
PT   New predictor sets with a plurality of polynucleotides and/or
PT   polypeptides whose expression pattern predicts cell response to a
PT   compound that modulates protein tyrosine kinase activity, useful in
PT   treating breast cancer.
XX
PS   Example 5; SEQ ID NO 557; 649pp; English.
XX
CC   The invention relates to a novel predictor set comprising a plurality of
CC   polynucleotides and/or polypeptides whose expression pattern is
CC   predictive of the response of cells to treatment with a compound that
CC   modulates protein tyrosine kinase activity or members of the protein
CC   tyrosine kinase pathway. The molecules of the invention demonstrate
CC   cytostatic, antiangiogenic, vasotropic and vulnerary activities and may
CC   be useful in the field of pharmacogenomics, in particular for determining
CC   drug sensitivity and in treating breast cancer, hypervascular diseases,
CC   angiogenesis and scars in wound healing. The current sequence is that of
CC   an antisense RNAi (interfering RNA) DNA-RNA hybrid oligonucleotide which
CC   was targeted to a human protein tyrosine kinase biomarker polynucleotide
CC   of the invention.
XX
SQ   Sequence 21 BP; 4 A; 4 C; 7 G; 2 T; 4 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        448 AACTACACCTGCGTCGTGGAG 468
              |||||||||| |  |||||||
Db         21 AACTACACCTTCACCGTGGAG 1


RESULT 931
AAT30421/c
ID   AAT30421 standard; DNA; 22 BP.
XX
AC   AAT30421;
XX
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```
DT   28-JAN-1997  (first entry)
XX
DE   Compound simple sequence repeat primer (AT)6.5(GT)4.5.
XX
KW   Detection; polymorphism; perfect compound simple sequence repeat;
KW   adaptor directed primer; genome; genetic; fingerprinting;
KW   amplified fragment length polymorphism assay; microsatellite region;
KW   genetic trait marking; germplasm comparisons; compound; ss.
XX
OS   Synthetic.
XX
PN   WO9617082-A2.
XX
PD   06-JUN-1996.
XX
PF   21-NOV-1995;   95WO-US015150.
XX
PR   28-NOV-1994;   94US-00346456.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Morgante M,  Vogel JM;
XX
DR   WPI; 1996-277795/28.
XX
PT   Modified amplified fragment length polymorphism assay - for detection of
PT   polymorphism esp. in micro:satellite regions.
XX
PS   Disclosure; Fig 1c; 173pp; English.
XX
CC   Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC   microsatellite regions, comprises digesting the nucleic acid to generate
CC   fragments, ligating adaptor segments to their ends, amplifying them using
CC   primer directed amplification and comparing the prods. to detect
CC   differences. The primers used in the amplification comprise a primer
CC   consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC   directed primer, comprising a sequence complementary to an adaptor
CC   segment. The present sequence is an example of a compound SSR primer. The
CC   method represents a modified amplified fragment length polymorphism
CC   assay, which is partic. useful for genome fingerprinting, i.e. for
CC   genetic trait marking and germplasm comparisons
XX
SQ   Sequence 22 BP; 6 A; 0 C; 5 G; 11 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   85.7%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2824 ATATATACATATATATATATA 2844
              | | | ||||||||||||||||
Db         21 ACACACACATATATATATATA 1


RESULT 932
AAT30422
ID   AAT30422 standard; DNA; 22 BP.
XX
AC   AAT30422;
XX
DT   28-JAN-1997  (first entry)
XX
DE   Compound simple sequence repeat primer (AT)8.5(GT)3.5.
XX
KW   Detection; polymorphism; perfect compound simple sequence repeat;
KW   adaptor directed primer; genome; genetic; fingerprinting;
KW   amplified fragment length polymorphism assay; microsatellite region;
KW   genetic trait marking; germplasm comparisons; compound; ss.
XX
OS   Synthetic.
XX
PN   WO9617082-A2.
XX
PD   06-JUN-1996.
XX
PF   21-NOV-1995;   95WO-US015150.
XX
PR   28-NOV-1994;   94US-00346456.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Morgante M,  Vogel JM;
XX
DR   WPI; 1996-277795/28.
XX
PT   Modified amplified fragment length polymorphism assay - for detection of
PT   polymorphism esp. in micro:satellite regions.
XX
PS   Disclosure; Fig 1c; 173pp; English.
XX
CC   Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC   microsatellite regions, comprises digesting the nucleic acid to generate
CC   fragments, ligating adaptor segments to their ends, amplifying them using
CC   primer directed amplification and comparing the prods. to detect
CC   differences. The primers used in the amplification comprise a primer
CC   consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC   directed primer, comprising a sequence complementary to an adaptor
CC   segment. The present sequence is an example of a compound SSR primer. The
CC   method represents a modified amplified fragment length polymorphism
CC   assay, which is partic. useful for genome fingerprinting, i.e. for
CC   genetic trait marking and germplasm comparisons
XX
SQ   Sequence 22 BP; 8 A; 0 C; 3 G; 11 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   85.7%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2823 TATATATACATATATATATAT 2843
              |||||||| |||||||| | |
Db          1 TATATATATATATATATGTGT 21


RESULT 933
AAT30422/c
ID   AAT30422 standard; DNA; 22 BP.
XX
AC   AAT30422;
XX
DT   28-JAN-1997  (first entry)
XX
DE   Compound simple sequence repeat primer (AT)8.5(GT)3.5.
XX
KW   Detection; polymorphism; perfect compound simple sequence repeat;
KW   adaptor directed primer; genome; genetic; fingerprinting;
KW   amplified fragment length polymorphism assay; microsatellite region;
KW   genetic trait marking; germplasm comparisons; compound; ss.
XX
OS   Synthetic.
XX
PN   WO9617082-A2.
XX
PD   06-JUN-1996.
XX
PF   21-NOV-1995;   95WO-US015150.
XX
PR   28-NOV-1994;   94US-00346456.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Morgante M,  Vogel JM;
XX
DR   WPI; 1996-277795/28.
XX
PT   Modified amplified fragment length polymorphism assay - for detection of
PT   polymorphism esp. in micro:satellite regions.
XX
```

PS Disclosure; Fig 1c; 173pp; English.
XX
CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a compound SSR primer. The
CC method represents a modified amplified fragment length polymorphism
CC assay, which is partic. useful for genome fingerprinting, i.e. for
CC genetic trait marking and germplasm comparisons
XX
SQ Sequence 22 BP; 8 A; 0 C; 3 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 1.3e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2824 ATATATACATATATATATATA 2844
|| | ||| ||||||||||||||
Db 21 ACACATATATATATATATATA 1

RESULT 934
AAT30407/c
ID AAT30407 standard; DNA; 22 BP.
XX
AC AAT30407;
XX
DT 28-JAN-1997 (first entry)
XX
DE Compound simple sequence repeat primer (AT)6.5(GT)4.5.
XX
KW Detection; polymorphism; perfect compound simple sequence repeat;
KW adaptor directed primer; genome; genetic; fingerprinting;
KW amplified fragment length polymorphism assay; microsatellite region;
KW genetic trait marking; germplasm comparisons; compound; ss.
XX
OS Synthetic.
XX
PN WO9617082-A2.
XX
PD 06-JUN-1996.
XX
PF 21-NOV-1995; 95WO-US015150.
XX
PR 28-NOV-1994; 94US-00346456.
XX
PA (DUPO) DU PONT DE NEMOURS & CO E I.
XX
PI Morgante M, Vogel JM;
XX
DR WPI; 1996-277795/28.
XX
PT Modified amplified fragment length polymorphism assay - for detection of
PT polymorphism esp. in micro:satellite regions.
XX
PS Example 2; Page 84; 173pp; English.
XX
CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a compound SSR primer. The
CC method represents a modified amplified fragment length polymorphism
CC assay, which is partic. useful for genome fingerprinting, i.e. for
CC genetic trait marking and germplasm comparisons
XX
SQ Sequence 22 BP; 6 A; 0 C; 5 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 1.3e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2824 ATATATACATATATATATATA 2844
|| | ||| ||||||||||||||
Db 21 ACACACACATATATATATATA 1

RESULT 935
AAZ90067/c
ID AAZ90067 standard; DNA; 22 BP.
XX
AC AAZ90067;
XX
DT 09-MAY-2000 (first entry)
XX
DE Oligonucleotide #1 used in gag-pol expression cassette construction.
XX
KW Gag; pol; retroviral vector construct; gag/pol expression cassette;
KW anticancer; antiviral; immunomodulatory; cytotoxin; prodrug activator;
KW replacement gene; antisense sequence; ribozyme; tumour prevention;
KW viral infection; genetic disorder; ss.
XX
OS Synthetic.
XX
PN US6013517-A.
XX
PD 11-JAN-2000.
XX
PF 05-MAY-1997; 97US-00850961.
XX
PR 09-MAY-1994; 94US-00240030.
PR 09-MAY-1995; 95US-00437465.
PR 06-MAY-1996; 96US-00643411.
PR 26-SEP-1996; 96US-00721327.
XX
PA (CHIR) CHIRON CORP.
XX
PI Depolo NJ, Chada S, Sauter S, Bodner M, Driver DA, Respess JG;
XX
DR WPI; 2000-159877/14.
XX
PT New retroviral construct, used to produce retroviral particles for gene
PT therapy, containing a gag/pol sequence that includes at least two stop
PT codons, incapable of producing replicable virus by recombination.
XX
PS Example 3; Col 24; 63pp; English.
XX
CC This sequence represents an oligonucleotide used in the construction of
CC gag-pol expression cassettes. The invention relates to a retroviral
CC vector construct which consists of a 5'-long terminal repeat (5'-LTR); a
CC tRNA binding site; an origin of second strand DNA synthesis; a 3'-LTR and
CC gag/pol sequences modified to contain two or more stop codons. The
CC invention also relates to a gag/pol expression cassette, and an env
CC expression cassette. The retroviral construct has anticancer, antiviral
CC and immunomodulatory activity. The retroviral constructs are used to
CC produce recombinant retroviral particles for use in gene transfer,
CC particularly gene therapy, e.g. to deliver heterologous sequences that
CC encode cytotoxins, prodrug activators, replacement genes, antisense
CC sequences or ribozymes, immune accessory molecules and viral immunogens,
CC particularly for treatment or prevention of tumours, viral infections and
CC genetic disorders
XX
SQ Sequence 22 BP; 9 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 1.3e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2819 ATGGTATATATACATATATAT 2839

```
                ||||||| ||| ||||||||
Db         21 ATGGTATCGATATATATATAT 1


RESULT 936
AAH91679/c
ID   AAH91679 standard; DNA; 22 BP.
XX
AC   AAH91679;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Human inflammatory bowel disease associated polymorphic site #754.
XX
KW   Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;
KW   single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;
KW   chromosome 5q31-33; forensic test; gene therapy; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    8
FT                   /*tag=  a
FT                   /note= "SNP, optionally T or A at this position"
XX
PN   WO200142511-A2.
XX
PD   14-JUN-2001.
XX
PF   11-DEC-2000; 2000WO-US033632.
XX
PR   10-DEC-1999;   99US-0170257P.
PR   10-APR-2000; 2000US-0196046P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.
XX
PI   Daly M,  Hudson TJ,  Lander ES,  Rioux J,  Siminovitch K;
XX
DR   WPI; 2001-367874/38.
XX
PT   Testing for the presence of polymorphisms associated with inflammatory
PT   bowel disease, using a hybridization assay.
XX
PS   Claim 1; Page 71; 463pp; English.
XX
CC   The present invention describes a method for detecting the presence of
CC   polymorphisms associated with inflammatory bowel diseases such as
CC   ulcerative colitis and Crohn's disease. The methods can be used to detect
CC   the presence of genetic polymorphisms associated with inflammatory bowel
CC   disease and correlating their occurrence with disease states. They may be
CC   used in this way for phenotypic correlations, forensics, paternity
CC   testing, medicine and genetic analysis. The present sequence is a
CC   polymorphic site described in the exemplification of the invention
XX
SQ   Sequence 22 BP; 11 A; 3 C; 0 G; 7 T; 0 U; 1 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   81.8%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       3469 TATCTATATATATAATTTATTG 3490
                ||| ||||||||||  || |||
Db         22 TATATATATATATANGTTGTTG 1


RESULT 937
ABK33880/c
ID   ABK33880 standard; DNA; 22 BP.
XX
AC   ABK33880;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Gag/pol expression cassette construction primer #1.
XX
KW   MoMLV; Moloney murine leukaemia virus; mouse; retroviral backbone; LTR;
KW   gag/pol expression cassette; gag; pol; env; integrase; gene therapy; ss;
KW   tumour; cancer; viral infection; immune response; autoimmune response;
KW   graft rejection; cytostatic; antiviral; immunostimulant; PCR; primer;
KW   immunosuppressive; murine leukaemia virus 4070A amphotropic envelope;
KW   bovine growth hormone polyadenylation sequence; long terminal repeat.
XX
OS   Mus sp.
OS   Synthetic.
XX
PN   US6333195-B1.
XX
PD   25-DEC-2001.
XX
PF   07-JAN-2000; 2000US-00479776.
XX
PR   09-MAY-1994;   94US-00240030.
PR   09-MAY-1995;   95US-00437465.
PR   06-MAY-1996;   96US-00643411.
PR   26-SEP-1996;   96US-00721327.
PR   05-MAY-1997;   97US-00850961.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Respess JG,  Depolo NJ,  Chada S,  Sauter S,  Bodner M,  Driver DA;
XX
DR   WPI; 2002-163181/21.
XX
PT   New gag/pol expression cassette, for preparing retroviral particles for
PT   gene therapy, comprises a promoter, a gag/pol gene, and a polyadenylation
PT   sequence, and cannot form a replication competent virus by homologous
PT   recombination.
XX
PS   Example 3; Col 24; 63pp; English.
XX
CC   The invention relates to a gag/pol expression cassette comprising a
CC   promoter, a gag/pol gene (I) and a polyadenylation sequence in which the
CC   5' end of (I) has been modified to contain codons that are degenerate for
CC   gag, or the 3' end of (I) has been deleted without affecting the
CC   biological activity of the encoded integrase. The expression cassette and
CC   similar cassettes that express env protein, are used to produce
CC   recombinant retroviral particles by homologous recombination. These
CC   particles are gene transfer vectors, particularly for gene therapy of
CC   tumours or viral infections, also to induce an immune response, to treat
CC   or prevent diseases, or to suppress graft rejection or immune/autoimmune
CC   responses. This sequence represents an oligonucleotide primer used in
CC   construction of gag/pol expression cassettes of the invention
XX
SQ   Sequence 22 BP; 9 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   85.7%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2819 ATGGTATATATACATATATAT 2839
                ||||||| ||| ||||||||
Db         21 ATGGTATCGATATATATATAT 1


RESULT 938
ADH69177/c
ID   ADH69177 standard; DNA; 22 BP.
XX
AC   ADH69177;
XX
DT   25-MAR-2004  (first entry)
XX
DE   PLOD2 PCR primer #15.
XX
KW   human; collagenous matrix; hydroxyallysine cross-link;
```

KW allysine cross-link; proteolytic degradation; fibrosis;
KW tissue engineering; Bruck syndrome; ss; PCR; primer.
XX
OS Homo sapiens.
XX
PN US2003219852-A1.
XX
PD 27-NOV-2003.
XX
PF 28-JUN-2002; 2002US-00184372.
XX
PR 29-NOV-1999; 99US-00450209.
XX
PA (NEDE) NEDERLANDSE ORG TOEGEPAST.
XX
PI Bank RA, Van Der Slot AJ, Zuurmond A, Te Koppele JM;
XX
DR WPI; 2004-080749/08.
XX
PT Obtaining a collagenous matrix with modified resistance against
PT proteolytic degradation, for treating a fibrotic condition, comprises
PT controlling the ratio of hydroxyallysine to allysine cross-links.
XX
PS Example 3; Page 12; 25pp; English.
XX
CC The invention relates to a method of obtaining a collagenous matrix which
CC comprises cross-linked collagen molecules, where the resistance of the
CC collagenous matrix against proteolytic degradation is controlled by
CC controlling the ratio of hydroxyallysine cross-links to allysine cross-
CC links in the collagenous matrix. The method is useful for obtaining a
CC collagenous matrix comprising cross-linked collagen molecules, where the
CC resistance of the collagenous matrix to proteolytic degradation, is
CC modulated. The method is useful for treating a fibrotic condition in a
CC mammal by administering to the mammal (preferably human) an effective
CC amount of a compound or composition which reduces the lysyl hydroxylation
CC level of collagen telopeptides and thereby results in a collagenous
CC matrix having a decreased ratio of hydroxyallysine cross-links to
CC allysine cross-links. The method comprises administration of compound or
CC composition that inhibits the activity or production of TLH encoded by a
CC PLOD2 gene but not the activity or production of lysyl oxidase. The
CC method is useful for treating fibrosis by inhibiting fibrotic processes,
CC in tissue engineering or drug delivery. The method provides collagen
CC cross-linked by hydroxyallysine cross-links which are more difficult to
CC degrade than collagen cross-linked by allysine. The present sequence
CC represents a PLOD2 PCR primer.
XX
SQ Sequence 22 BP; 10 A; 9 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 1.3e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2325 GTGTGTGTGCGTGTGTGTGTG 2345
||||||||||||||||||||
Db 21 GTGTGTCTGTGTGTGTATGTG 1

RESULT 939
ADL57201
ID ADL57201 standard; DNA; 22 BP.
XX
AC ADL57201;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human NOV1 forward real time quantitative PCR primer SEQ ID NO:146.
XX
KW ss; PCR; primer; real time quantitative PCR; human; antidiabetic;
KW anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic;
KW virucide; antibacterial; fungicide; protozoacide; nootropic;
KW neuroprotective; antiparkinsonian; anticonvulsant; osteopathic;
KW antiarthritic; antiinflammatory; dermatological; antiasthmatic;
KW antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGFR4;
KW complement factor I precursor; matrix metalloproteinase-15 precursor;
KW MDC3; T-lymphocyte surface antigen Ly-9 precursor;
KW fibroblast growth factor-21; FGF-21;
KW alpha-2 macroglobulin-like polypeptide variant;
KW antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1;
KW transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
XX
OS Homo sapiens.
XX
PN WO2004022723-A2.
XX
PD 18-MAR-2004.
XX
PF 09-SEP-2003; 2003WO-US028141.
XX
PR 09-SEP-2002; 2002US-0409145P.
PR 10-SEP-2002; 2002US-0409544P.
PR 12-SEP-2002; 2002US-0410320P.
PR 16-SEP-2002; 2002US-0411060P.
PR 23-SEP-2002; 2002US-0412766P.
PR 23-SEP-2002; 2002US-0412825P.
PR 24-SEP-2002; 2002US-0412767P.
PR 25-SEP-2002; 2002US-0413342P.
PR 30-SEP-2002; 2002US-0414832P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Zhong M, Guo X, Anderson DW, Ort T, Padigaru M, Rieger DK;
XX
DR WPI; 2004-315567/29.
XX
PT New isolated NOVX polypeptides and polynucleotides, useful for
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT asthma, or infections.
XX
PS Example 12; SEQ ID NO 146; 214pp; English.
XX
CC The invention relates to a novel isolated polypeptide (NOVX) comprising a
CC mature form of any of the 37 amino acid sequences fully defined in the
CC specification. A polypeptide of the invention has antidiabetic,
CC anorectic, cardiant, hypotensive, antiarteriosclerotic, anorectic,
CC virucide, antibacterial, fungicide, protozoacide, nootropic,
CC neuroprotective, antiparkinsonian, anticonvulsant, osteopathic,
CC antiarthritic, antiinflammatory, dermatological, antiasthmatic, and
CC antilipaemic activity. A polynucleotide of the invention may have a use
CC in gene therapy. The polypeptides, nucleic acid molecules and antibodies
CC are useful in the manufacture of a medicament for treating a syndrome
CC associated with a human disease, preferably a NOVX-associated disorder.
CC The nucleic acid molecules, polypeptides and antibodies are useful for
CC treating, preventing or diagnosing diseases such as metabolic disorders,
CC diabetes, obesity, infectious diseases (viral, bacterial, fungal,
CC helminthic, and protozoal), anorexia, cancer, cardiovascular diseases
CC (hypertension, atherosclerosis), neurodegenerative disorders, Alzheimer's
CC disease, Parkinson's disease, epilepsy, immune disorders
CC (osteoarthritis), haematopoietic disorders, inflammatory skin disorders,
CC asthma, and various dyslipidaemias. The nucleic acids and polypeptides
CC may also be used as targets for the identification of small molecules
CC that modulate or inhibit e.g. neurogenesis, cell differentiation, cell
CC proliferation, haematopoiesis, wound healing and angiogenesis, in gene
CC therapy, in generation of antibodies that bind immunospecifically to NOVX
CC substances for use in therapeutic or diagnostic methods. The nucleic
CC acids are further used as hybridisation probes, in chromosome mapping,
CC tissue typing, preventive medicine, and pharmacogenomics. The NOVX
CC polypeptides of the invention show homology to certain known human
CC proteins: NOV1a-1t show homology to fibroblast growth factor receptor 4
CC (FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a
CC shows homology to matrix metalloproteinase-15 precursor; NOV4a shows
CC homology to MDC3; NOV5a-5c show homology to T-lymphocyte surface antigen
CC Ly-9 precursor; NOV6a-6m show homology to fibroblast growth factor-21
CC (FGF-21); NOV7a-7c show homology to alpha-2 macroglobulin-like
CC polypeptide variant; NOV8a-8g show homology to antileukoproteinase 1
CC precursor; NOV9a-9i show homology to LIV-1 protein; NOV10a shows homology

```
CC   to nuclear hormone receptor NOR-1; NOV11a-11j show homology to
CC   transmembrane protein-like; NOV12a-12c show homology to beta-neoendorphin
CC   -dynorphin precursor. The present sequence represents a PCR primer used
CC   in the exemplification of the invention.
XX
SQ   Sequence 22 BP; 9 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   85.7%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1293 CGTGAAGATGCTGAAAGACGA 1313
              ||| |||||||| |||||| |
Db          1 CGTCAAGATGCTCAAAGACAA 21


RESULT 940
ADQ75599
ID   ADQ75599 standard; DNA; 22 BP.
XX
AC   ADQ75599;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Clock gene intron PCR primer, SEQ ID 7.
XX
KW   Clock gene; DNA fingerprint; PCR; primer; ss.
XX
OS   Unidentified.
XX
PN   KR2003075818-A.
XX
PD   26-SEP-2003.
XX
PF   21-MAR-2002; 2002KR-00015277.
XX
PR   21-MAR-2002; 2002KR-00015277.
XX
PA   (KOOC-) KOREA OCEAN RES & DEV INST.
XX
PI   Kim WS,  Lee YH;
XX
DR   WPI; 2004-105148/11.
XX
PT   Identification of organism using the intron DNA sequence of the clock
PT   gene as DNA fingerprints.
XX
PS   Claim 3; SEQ ID NO 7; 19pp; Korean.
XX
CC   The present invention relates to a method for identifying an organism
CC   using the intron sequence of the clock gene as DNA fingerprints. The
CC   method comprises the steps of: constructing a pair of primers for PCR
CC   capable of amplifying intron using consecutive nucleotide sequences
CC   before and after of the clock gene intron; amplifying intron by PCR using
CC   the pair of primers; sequencing the amplified intron DNA fragments; and
CC   identifying the organism to analyse the nucleotide sequence of the
CC   intron. The present sequence is a PCR primer used in the method of the
CC   invention.
XX
SQ   Sequence 22 BP; 4 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   85.7%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        992 TGGGCTCCCCCACCGTGCACA 1012
              |||||||| |||| || ||||
Db          2 TGGGCTCCTCCACTGTACACA 22


RESULT 941
ADP74809/c
ID   ADP74809 standard; DNA; 22 BP.
XX
AC   ADP74809;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Trypanosoma brucei TSIF PCR primer.
XX
KW   Trypanosoma brucei; trypanosome suppressive immunomodulating factor;
KW   TSIF; immunomodulating activity; Trypanozoon infection;
KW   immunosuppressive; gene therapy; immune response; autoimmune disorder;
KW   PCR; primer; ss.
XX
OS   Trypanosoma brucei.
OS   Synthetic.
XX
PN   WO2004056853-A2.
XX
PD   08-JUL-2004.
XX
PF   19-DEC-2003; 2003WO-EP051082.
XX
PR   23-DEC-2002; 2002EP-00080667.
XX
PA   (VIBV-) VIB VZW.
XX
PI   De Baetselier P,  Beschin A;
XX
DR   WPI; 2004-500278/47.
XX
PT   New polypeptide derived from Trypanosomes, useful in preparing a
PT   medicament for suppressing the immune response in a mammal for treating
PT   autoimmune disorders.
XX
PS   Example; Page 28; 54pp; English.
XX
CC   The present invention describes a Trypanosoma brucei trypanosome
CC   suppressive immunomodulating factor (TSIF) protein. The present invention
CC   also describes: (1) the TSIF protein having the primary structural
CC   information of amino acids 1-553 of the 833-amino acid sequence of SEQ ID
CC   NO:2 (ADP74801) or its fragment or allelic variant having
CC   immunomodulating activity; (2) an isolated polynucleotide comprising a
CC   2826 base pair sequence of SEQ ID NO:1 (ADP74800) which encodes the TSIF
CC   polypeptide; (3) a vector comprising the nucleic acid; (4) a genetically
CC   engineered host cell comprising the expression vector; and (5) preparing
CC   a diagnostic assay for detecting the presence of a Trypanozoon infection
CC   in a mammal. TSIF has immunosuppressive activity, and can be used in gene
CC   therapy. The TSIF polypeptide or polynucleotide can be used in preparing
CC   a medicament for suppressing the immune response in a mammal for treating
CC   autoimmune disorders. The present sequence represents a PCR primer for
CC   TSIF, which is used in an example from the present invention.
XX
SQ   Sequence 22 BP; 4 A; 4 C; 8 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 22;
  Best Local Similarity   85.7%;  Pred. No. 1.3e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        603 GGTGTACAGTGACGCACAGCC 623
              ||| |||| ||||||||| ||
Db         22 GGTATACACTGACGCACACCC 2


RESULT 942
AAX34311/c
ID   AAX34311 standard; DNA; 23 BP.
XX
AC   AAX34311;
XX
DT   06-JUL-1999  (first entry)
XX
DE   Human oestrogen receptor gene PCR primer #2.
XX
KW   Human; oestrogen receptor; ligand; bone resorption; metabolic disorder;
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KW   cardiovascular disease; cancer; central nervous system; breast; uterine;
KW   osteoporosis; ovarian; prostate; diabetes; Alzheimer's disease; PCR;
KW   primer; amplification; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9912961-A1.
XX
PD   18-MAR-1999.
XX
PF   04-SEP-1998;   98WO-US018577.
XX
PR   08-SEP-1997;   97US-0058271P.
PR   30-SEP-1997;   97US-0060520P.
PR   30-OCT-1997;   97GB-00022884.
PR   20-MAR-1998;   98GB-00006032.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Wilkinson H;
XX
DR   WPI; 1999-229222/19.
XX
PT   Estrogen receptor useful in ligand identification in medicine.
XX
PS   Example 1; Page 14; 32pp; English.
XX
CC   Primers AAX34310-X34312 were used to PCR amplify and isolated cDNA clones
CC   encoding a human oestrogen receptor (AAX34309). The receptor can be used
CC   to identify ligands that bind to human oestrogen receptor. The ligands
CC   can be used in a method for preventing or treating an oestrogen receptor
CC   mediated disease or condition, such as abnormal bone resorption, a
CC   cardiovascular disease, cancer, metabolic disorders, or central nervous
CC   system disorders. The ligand is especially used to treat osteoporosis,
CC   breast, uterine, ovarian or prostate cancer, diabetes or Alzheimer's
CC   disease
XX
SQ   Sequence 23 BP; 3 A; 10 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 23;
  Best Local Similarity   85.7%;  Pred. No. 1.4e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        666 GGTGGGCCCGGACGGCACACC 686
              |||||||| || ||||| |||
Db         23 GGTGGGCCTGGTCGGCAGACC 3


RESULT 943
AAX76596
ID   AAX76596 standard; DNA; 23 BP.
XX
AC   AAX76596;
XX
DT   11-AUG-1999  (first entry)
XX
DE   Human sFv library construction PCR primer SEQ ID NO:8.
XX
KW   Human; sFV library; single chain monoclonal antibody fusion reagent;
KW   transcription regulation; screening; diagnosis; HIV; Hepatitis A;
KW   Hepatitis B respiratory syncitial virus; Junin virus; cytomegalovirus;
KW   Herpes simplex virus; rubella; Varicella-Zoster virus; hantavirus;
KW   Epstein-Barr virus; measles; dengue; Ebola inter alia; cancer;
KW   gene therapy; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9928502-A1.
XX
PD   10-JUN-1999.
XX
PF   28-NOV-1997;   97WO-US021407.
XX
PR   28-NOV-1997;   97WO-US021407.
XX
PA   (INVI-) INVITROGEN CORP.
XX
PI   Hoeffler JP,  Russell M;
XX
DR   WPI; 1999-371138/31.
XX
PT   Antibodies from libraries useful in treating viral infections and cancer.
XX
PS   Claim 23; Page 81; 132pp; English.
XX
CC   The present invention describes methods of screening a DNA construct
CC   library for a single chain monoclonal antibody fusion reagent capable of
CC   binding a transcriptional associated biomolecule in vivo. The antibodies
CC   are useful in treating Hepatitis A and B respiratory syncitial virus,
CC   HIV, Junin virus, Herpes simplex I and II, rubella, cytomegalovirus,
CC   Varicella-Zoster virus, Epstein-Barr virus, measles, hantavirus, dengue,
CC   Ebola inter alia and cancer. Expression vectors that encode the fusion
CC   antibodies may be used in gene therapy. The methods can be used to create
CC   and isolate the fusion antibodies. The monoclonal antibody fusion reagent
CC   can be used to regulate transcription in vivo. AAX76591 to AAX76674
CC   represent specifically claimed PCR primers used in the construction of a
CC   human sFv library
XX
SQ   Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 23;
  Best Local Similarity   85.7%;  Pred. No. 1.4e+03;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        854 AGGAGGAGCTGGTGGAGGCTG 874
              ||| | |||||||||||| |||
Db          2 AGGTGCAGCTGGTGGAGTCTG 22


RESULT 944
AAA59845/c
ID   AAA59845 standard; DNA; 23 BP.
XX
AC   AAA59845;
XX
DT   13-OCT-2000  (first entry)
XX
DE   PCR primer specific for zeta-COP.
XX
KW   Human; capsid-protein; zeta-COP; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   CN1248624-A.
XX
PD   29-MAR-2000.
XX
PF   22-SEP-1998;   98CN-00119744.
XX
PR   22-SEP-1998;   98CN-00119744.
XX
PA   (XINH-) XINHUANGPU FUDAN GENE ENG CO LTD SHANGHA.
XX
PI   Yu L,  Tu Q,  Fu Q;
XX
DR   WPI; 2000-431993/38.
XX
PT   Novel human capsid protein subunit coding sequence.
XX
PS   Example 1; Page 9; 21pp; Chinese.
XX
CC   This invention relates to a human gene encoding a capsid protein zeta
CC   subunit (zeta-COP). The invention also relates to a zeta-COP protein
CC   sequence. The present sequence represents a PCR primer used to amplify
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